

The Mining Journal.

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[The MINING JOURNAL is Registered at the General Post Office as a Newspaper and for Transmission Abroad.]

No. 2335.—VOL. L.

LONDON, SATURDAY, MAY 22, 1880.

[WITH SUPPLEMENT.] {PRICE SIXPENCE
PER ANNUM, BY POST, £1 4s.

MR. JAMES H. CROFTS, STOCK AND SHARE BROKER,
AND MINING SHARE DEALER,
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.
ESTABLISHED 1842.

BUSINESS transacted in all descriptions of MINING Stocks and Shares (British and Foreign), Consols, Bonds (Foreign and Colonial), Railways, Insurance, Assurance, Telegraph, Tramway, Shipping, Canal, Gas, Water, and Dock Shares, and all Miscellaneous Shares.

BUSINESS negotiated in Stocks and Shares not having a general market value.

Every Friday a general and reliable List issued (a copy of which will be forwarded regularly on application), containing closing prices of the week.

MINES INSPECTED.

BANKERS: CITY BANK, LONDON—SOUTH CORNWALL BANK, ST. AUSTELL.

SPECIAL DEALINGS in the following, or part:—
50 Almada, 13s. 6d. 50 Javali, 5s. 9d. 40 Ruby, £8 13s. 9d.
25 Carnarvon Cop., 22s. 50 Killifreth, 17s. 30 Richmond, £16 3s. 9d.
10 Devon Consols, £13 7 6 25 Leadhills, £3. 10 Roman Gravel, £10 1/2
50 East Crebor, 19s. 6d. 25 Marke Valley, £1 17 6 50 S. Indian Gold, 36s. 3d.
25 East Caradon, £2. 25 Nouveau Monde, 33s. 9 20 Santa Barbara, £2 1/2
25 E. Roman Gravel, 16s. 30 N. Penstruthal, £1 1/2 10 So. Condurow, £1.
20 East Van, £3 8s. 9d. 25 N. D'Esby, 20s. 25 South Darren, £3 1/2
25 Flagstaff, 20s. 20 N. Herodfoot, 10s. 25 So. East Wynad, £4 1/2
50 Frontino, £3 16s. 3d. 30 Pandora, 19s. 50 S. Penstruthal, 10s.
30 Glenrock, 30s. 30 Port Nigel, £2. 10 Tankerville, £4 1/2
25 Glenroy, 22s. 100 Port Phillip, 10s. 10 U. Van & Glyn, 13s.
25 Grogwinon, £3. 50 Prince of Wales, 15s. 100 West Phoenix, £2 1/2
50 Herodfoot, £3 17s. 6d. 75 Farys Copper, £1 7 6 15 Wheel Crebor, £3 1/2
50 Hington Down, 20s. 200 Pestarena, 5s.

“S” SHARES SOLD FOR FORWARD DELIVERY (ONE, TWO, OR THREE MONTHS) ON DEPOSIT OF TWENTY PER CENT.

RAILWAYS—SPECIAL BUSINESS.

FOREIGN BONDS—SPECIAL BUSINESS.

Fortnightly accounts opened on receipt of the usual cover.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.
ESTABLISHED 1842.

MR. W. H. BUMPUS, STOCK AND SHARE BROKER,
AND MINING SHARE DEALER,
44, THREADNEEDLE STREET, LONDON, E.C.
ESTABLISHED 1867.

BUSINESS transacted in STOCK EXCHANGE SECURITIES
AND MISCELLANEOUS SHARES of every description.

RAILWAYS, BANKS, FOREIGN AND COLONIAL BONDS.

TRAMWAYS, TELEGRAPHS, and all the LEADING INVESTMENTS.

Accounts opened for the Fortnightly Settlement

A List of Investments free on application.

MR. BUMPUS has SPECIAL BUSINESS in the undermentioned:—
40 Aberllyn, 22s. 5 East Pool, £32 1/2 50 Pen-yr-Oreadd.
50 Almada, 11s. 6d. 40 E. Roman Gravel, £2 1/2 25 Panicle, £3 1/2
30 Blue Teat, £2. 20 Frongoch, £4 11s. 3d. 100 Port Phillip, 12s.
100 Bodidris, 20s. 30 Frontino, £3 19s. 6d. 100 Parys Copper, 24s.
2 Carn Brea, £79. 50 Flagstaff, 22s. 50 Prince of Wales, 16s. 6
70 Carnarvon, 21s. 100 Glenroy, 21s. 6d. 20 Ruby, £8 1/2
5 Cape Copper, £38. 15 Great Holway. 15 Roman Gravel, £10 1/2
50 Colorado, 41s. 6d. 25 Grogwinon, £2 1/2 10 Richmond, £16 3s. 9d.
50 Consolidated, 19s. 6d. 5 Great Laxey, £18 1/2 50 South Indian, 36s. 3d.
10 Coplapo, £9. 20 Hington Down, £3 1/2 20 Santa Barbara, £2 1/2
3 Dolcoath, £5s. 20 Herodfoot, 10s. 5 Tincroft.
100 Don Pedro, 14s. 6d. 75 Indian Glenrock, 29s. 6
50 Derwent, £23 1/2 50 Killifreth. 25 W. Devon Con., £39 9
15 Devon Cons., £13 1/2 10 Morfa Du, 23s. 50 West Phoenix.
25 Eberhardt, £3 1/2 25 Marke Valley, 39s. 6d. 30 Wheel Sisters, £3 1/2
40 East Caradon, 41s. 6d. 50 No. Herodfoot, 11s. 6d. 100 Wheel Grenville.
25 East Van, £3 1/2 100 Nouveau Monde, 36s. 100 Wheel Jewell, 17s. 6d.
50 East Crebor. 40 New Peevor. 15 Wheel Kitty.
30 Pandora, 17s. 25 Wheel Crebor, £3 16 9

SPECIAL BUSINESS, at close prices, in the SHARES of all the principal
HOME AND FOREIGN MINES.

Mr. BUMPUS devotes special attention to these Securities, and is in a position
to afford reliable information and advice to intending investors and others.

The following Mines are particularly recommended:—
WHEEL CREBOR. WEST PEEVOR.
NEW PEEVOR. WHEEL SISTERS.
PEN-YR-OREADD. DERWENT. SOUTH DARREN.

WILLIAM HENRY BUMPUS, SWORN BROKER.

OFFICES: 44, THREADNEEDLE STREET, LONDON, E.C.
ESTABLISHED 1867.

FERDINAND R. KIRK, 5, BIRCHIN LANE,
LONDON, E.C.

FORTNIGHTLY ACCOUNTS opened, on receipt of the usual “cover,” in
Railways Home and Foreign, Mining Shares, Foreign Bonds, and certain Miscellaneous Securities.

“THE WEEK.”—A SEPARATE EDITION from that which appears in the
Mining Journal is published every Wednesday evening, containing “Notes and
Hints on the Stock Markets,” with Closing Prices. May be had on application.

BANKERS: LONDON AND WESTMINSTER, Lothbury.

MR. E. J. BARTLETT, BRITISH AND FOREIGN STOCK
AND SHARE DEALER, No. 30, GREAT ST. HELEN'S, LONDON, E.C.
PEN-YR-OREADD, GREAT HOLWAY, and WEST HOLWAY shares should
have a great rise—rich courses of ore proved.

JUST OUT.

“HOW TO INVEST,” post free, 1s., Fourteenth Edition, much enlarged.

MR. JOHN RISLEY, STOCK AND SHARE BROKER,
38, CORNHILL, LONDON, E.C.
ESTABLISHED 1853.

BANKERS: LONDON AND WESTMINSTER, Lothbury.

WEST CARADON, POLROSE, PARYS CORPORATION, and WHEEL
CREBOR specially recommended.

MR. W. B. COBB, STOCK AND SHARE DEALER,
29, BISHOPSGATE STREET, LONDON, E.C.

Business transacted in every description of Stocks and Shares. Fortnightly
accounts opened on receipt of usual cover.

BWLON UNITED.—The dressing-floor will shortly be ready to prepare for
market the large quantity of ore now at surface, from which a good dividend is
secured.

BANKERS: ALLIANCE BANK (Limited).

MR. GEORGE BUDGE, STOCK AND SHARE DEALER,
9, GRACECHURCH STREET, LONDON, E.C. (Established 28 years).

ALL BUSINESS TRANSACTED FREE OF ANY CHARGE FOR
COMMISSION.

Notice to Investors and Speculators.

MR. BUDGE has DEALINGS in:—
50 Bedford United. 25 East Caradon. 30 North Herodfoot.
50 Blaen Caelan. 20 Frongoch. 100 New Kitty.
75 Birdseye Creek. 100 Flagstaff. 30 Penhalls.
100 Bettwys-y-Coed. 50 Glenroy. 50 Pen-yr-Oreadd.
100 Consolidated. 40 Gawton. 30 Polrose.
40 Cambrian. 20 Grogwinon. 75 Prince of Wales.
50 Cwm Pryf. 50 Glenrock. 10 Roman Gravel.
50 Canadian. 40 Hington Down. 100 South D'Esby.
50 Derwent. 20 Gunnislake (Clitters). 50 South Indian.
100 Don Pedro. 20 Marke Valley. 30 South-East Wynad.
15 Devon Consols. 50 Mynydd Gorddu. 50 West Kitty.
125 Exchequer. 100 Nava de Jadraque. 60 West Caradon.
50 East Chiverton. 40 New Wye Valley. 100 West Holway.

SPECIAL BUSINESS in Ytwith Shares as Buyer or Seller.
Mr. BUDGE invites the attention of investors to the Wheel Coates United Tin
Mine, St. Agnes, and he strongly recommends the purchase of these shares,
10s. paid, at 25s. each. This mine is no speculation, as the reserves of tin enable
Mr. BUDGE to state that in a short time the mine will be making profits.

STOCK AND SHARE MARKETS.

Prices of STOCKS and SHARES in RAILWAYS, BANKS, ENGLISH
and FOREIGN GOVERNMENT SECURITIES, GAS, MINES, INSURANCE,
and other Stock Exchange Securities, and various important information
forwarded on application to—

MESSRS. PETER WATSON AND CO.,
18, AUSTIN FRIARS.

OLD BROAD STREET, LONDON, E.C.

BUYER and SELLER of SHARES at the close Market Price of the day.
BANKERS: THE ALLIANCE BANK (Limited).

MESSRS. PETER WATSON AND CO.'S
BRITISH AND FOREIGN MONTHLY MINING NEWS
—STOCK AND SHARE INVESTMENT NOTES—MINES,
MINERALS, AND METAL MARKETS—SHARE LIST,
No. 817, VOL. XV., for APRIL month, is now ready, and will
be sent to customers on application.

Annual Subscription..... 5s. [Single Copy..... 6d.

MESSRS. PETER WATSON AND CO.,
18, AUSTIN FRIARS, E.C.

MR. ALFRED E. COOKE,
DEALER IN NET PRICES IN EVERY DESCRIPTION OF STOCKS
AND SHARES,
76, OLD BROAD STREET, LONDON.
ESTABLISHED 1853.

Over 13 years at the above offices, adjoining the Stock Exchange and
Mining Markets.

Mr. ALFRED E. COOKE is visiting the North D'Esby Mountain and other
mines in that district, and will be pleased to give information to intending
investors. During his absence all business will receive prompt and special attention.

**WHAT SHARES DO YOU RECOMMEND FOR AN EARLY
ADVANCE?**

Investors requiring a reply to this question should send for the INVESTORS'
GAZETTE. Post free three stamps. The INVESTORS' GAZETTE has given
more profitable advice than any Private Circular.

Edited by—MR. ALFRED E. COOKE,
76, OLD BROAD STREET, LONDON.

STOCKS AND SHARES,
FOREIGN BONDS, TELEGRAPHS, TRAMWAYS, RAILWAYS, AND
OTHER LEADING SECURITIES.

MR. JAMES STOCKER, STOCKBROKER,
2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.
ESTABLISHED 1848.

SPECIAL BUSINESS in the following:—
Almada, 12s. 6d. 50 Pen-yr-Oreadd.
Carn Brea, £75. 25 Panicle, £3 1/2
Chontales, 3s. 3d. 100 Port Phillip, 12s.
Consolidated, 16s. 9d. 100 Parys Copper, 24s.
Cedar Creek, 2s. 6d. 50 Prince of Wales, 16s. 6
Derwent, £2 8s. 9d. 20 Ruby, £8 1/2
Devon Gt. Cons., £13. 15 Roman Gravel, £10 1/2
Don Pedro, 11s. 9d. 10 Richmond, £16 3s. 9d.
E. Rom. Gravel, 15s. 6d. 50 South Indian, 36s. 3d.
East Caradon, £2 1s. 6d. 20 Santa Barbara, £2 1/2
East Crebor, 18s. 20 Herodfoot, 10s. 5 Tincroft.
Eberhardt, £3 16s. 3d. 10 Van, £18 1/2
Emma, 11s. 6d. 25 W. Devon Con., £39 9
Exchequer. 50 West Phoenix.
Flagstaff, 21s. 30 Wheel Sisters, £3 1/2
100 Wheel Grenville.
100 Wheel Jewell, 17s. 6d.
15 Wheel Kitty.
25 Wheel Crebor, £3 16 9

MR. THOMAS THOMPSON, JUN., STOCK BROKER,
16, ST. SWITHIN'S LANE, E.C.

Mr. THOMPSON transacts business in every species of Stock Exchange and
Mining Securities.

Mr. THOMPSON affords reliable information to investors, and can give, when
desired, a list of first-class Stocks and Shares, yielding 4 to 10 per cent. dividends
upon present prices.

Mr. THOMPSON'S weekly Circular may be had on application.

**MESSRS. ENDEAN AND CO., STOCK AND SHARE
DEALERS, 85, GRACECHURCH STREET, LONDON, E.C.**

BANKERS: LONDON AND WESTMINSTER, Lothbury; and
BARCLAY, BEVAN, and CO., Lombard-street, E.C.

Messrs. ENDEAN and Co. strongly advise the purchase of well selected Lead
Mines at present low prices:—Van, Great Laxey, Roman Gravel, and Tamar,
also South Wheel Crebor (Copper). The next great rise will be in Lead Shares,
and many of those now offering will be eagerly sought after at considerably
higher prices immediately there is a run upon them.

Messrs. ENDEAN and Co. are prepared to deal in all the shares they recommend
at close prices.

Messrs. ENDEAN and Co. strongly advise the purchase of CARN CAMBORNE
shares. This mine lies between Dolcoath and South Condurow; the former is
selling for nearly £300,000, and the latter for £280,000. Carn Camborne is in
6000 shares, now to be had for £2 10s. Vigorous operations will be at once com-
menced, and there is every reason to believe that Carn Camborne will prove in
depth as rich as any of the great mines by which it is surrounded. Shares are
CERTAIN to have a considerable rise in price. Good sales of tin and copper will
be commenced within one month after the mine is in full work.

PENNINGTON AND CO., SWORN BROKERS,
3, ROYAL EXCHANGE BUILDINGS, E.C.

Transact business in every description of Stocks and Shares.
ESTABLISHED 1869.—BANKERS: ALLIANCE.

HORACE J. TAYLOR, STOCK AND SHARE DEALER,
38, GREAT ST. HELEN'S, LONDON, E.C.

(Late of the PORT PHILLIP and VICTORIA MINING COMPANIES.)

Mr. TAYLOR has DEALINGS in the undermentioned:—
100 Almada & Tinto. 10 Devon Great Consols. 100 Port Phillip.
100 Bedford United. 100 Eberhardt & Aurora. 150 Rossa Grande.
50 Consolidated. 50 East Caradon. 50 South Darren.
100 Colorado. 75 Frontino. 25 Tankerville.
75 Don Pedro. 100 Hington Down. 100 Victoria (London).
20 Derwent. 10 Prince of Wales. 50 Wheel Kitty.
200 Pestarena. 30 West Devon Consols.

BWLON UNITED MINES.—SPECIAL BUSINESS in these shares.
VICTORIA (London).—These shares should be bought for investment at 10s.,
as another dividend must shortly be declared.

WHEEL COATES UNITED.—Buyers of these shares should secure them at
once, for any advance in Tin would undoubtedly put the shares better. Price 25s.
BANKERS: CENTRAL BANK OF LONDON (Limited).

MR. W. MARLBOROUGH, STOCK AND SHARE DEALER,
29, BISHOPSGATE STREET, LONDON, E.C.

Can SELL the following SHARES at prices annexed:—
60 Almada, 13s. 20 Hington, £1 1s. 3d. 40 So. D'Esby, 30s.
75 Chontales, 3s. 3d. 15 Herodfoot, £3 18s. 9d. 20 So. Darren, £3 8s. 9d.
20 Colorado, £2 5s. 10 Hornachos, £7. 5 South Frances, £17 1/2
30 Consolidated, 18s. 9d. 15 Leadhills, £2 17s. 6d. 30 So. Indian Gold, £1 1/2
30 Cedar Creek, 2s. 6d. 20 Marke Valley, £1 18 9 20 Santa Barbara, £2 1/2
20 Derwent, £2 12s. 6d. 3 Minera, £11. 10 Tankerville, £4 18s. 9
10 Devon Consols, £13 1/2 20 New Quebrada, £3 1/2 2 Van, £19 1/2
50 Don Pedro, 16s. 3d. 30 Nout. Monde, 36s. 9d. 50 Van & Glyn United,
20 East Caradon, £2 1/2 50 Parys Copper, £1 6s. 3
25 East Crebor, 21s. 3d. 100 Pestarena, 6s. 20 West Devon, £3 8s. 9d.
15 East Van, £3 1/2 50 Port Phillip, 11s. 3d. 25 West Jewell, 19s. 6d.
20 Eberhardt, £4. 20 Panicle, £3 18s. 9d. 30 West Kitty, £1 18s. 6d.
40 Flagstaff. 50 Prince of Wales, 15s. 10 Wheel Crebor, £3 16 3
70 Glenroy, 20s. 3d. 50 So. Tolarne, 19s. 3d. 20 Wh. Grenville, £2 1/2
30 Glenrock Gold, £1 1/2 100 Rossa Grande, 4s. 25 Ytwith, £1 11s. 3d.

BWLON UNITED MINES.—SPECIAL BUSINESS in these shares.
SOUTH WHEEL CREBOR (Limited), £1 fully pd., strongly recommended at £1 1/2

MR. CHARLES THOMAS,
MINING AGENT, STOCK AND SHARE DEALER,
3, GREAT ST. HELEN'S, LONDON, E.C.

MR. ALFRED THOMAS,
MINING AGENT, AND STOCK AND SHARE DEALER,
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Second Edition, price 6d.

“HOW TO TAKE ADVANTAGE OF THE COMING RISE IN PRICES.”

TO INVESTORS, SHAREHOLDERS, TRUSTEES.

SAFE DIVIDEND INVESTMENTS PAYING 4 TO 6 AND 10 PER CENT.
PER ANNUM ON PRESENT OUTLAY.

SHARP'S INVESTMENT CIRCULAR.
The MAY EDITION (post free),

SHOULD BE CONSULTED BY INVESTORS AND SHAREHOLDERS.

It is a Reliable “Guide,” giving valuable information and Sound Advice,
It gives Market prices; Dividends upon outlay, when payable; Reports, &c.,

IT CONTAINS ALL THE SAFE INVESTMENTS IN THE FOLLOWING:—

English, Foreign Railways. Insurance, Gas, Waterworks.
Preference, Debenture Stocks. Colonial, Foreign Stocks.
Indian, American Stocks. British, Foreign, Colonial Mines.
Bank, Financial Shares. Tea, Land Shares.
Tramway, Telegraph Shares. Shipping, Dock Shares.
Municipal Bonds. Miscellaneous Shares, &c., &c.

HENRY GOULD SHARP, STOCK AND SHARE BROKER,

42, POULTRY, LONDON, E.C.—ESTABLISHED 1852.

BANKERS: LONDON AND WESTMINSTER, Lothbury, London, E.C.

JOHN B. REYNOLDS, STOCK AND SHARE DEALER,
37, WALBROOK, LONDON, E.C.

ESTABLISHED 20 YEARS.—BANKERS: LONDON & SOUTH-WESTERN.

Mr. REYNOLDS deals promptly at close prices in all descriptions of Stocks
and Shares, making a speciality of MINES, concerning which he can get
accurate information.

Mr. REYNOLDS points to the results of his recommendation of Mines in the
Peevor district as an illustration of the profits which can be made, and irre-
spective of market fluctuations, which no one can foresee.

He emphatically recommends the purchase of BLUE HILLS and WEST
PEEVORS, and notes the advance which has taken place in these shares since
last Saturday, and also refers to his repeated recommendations of them.

WEST KITTY will be the leading mine in the St. Agnes district, and must
inevitably have a still further and great advance in market value.

Mr. REYNOLDS also recommends NEW COOK'S KITCHENS, NEW
KITTY'S, and WEST PEEVORS for a rise of more than cent. per cent.

NOTICE OF REMOVAL.

GRANVILLE SHARP,
TO
32, QUEEN VICTORIA STREET, LONDON, E.C.

MR. EDWARD ASHMEAD has REMOVED from
Cornhill Chambers, 62, Cornhill, London, E.C., to
No. 2, DRAPER'S GARDENS, THROGMORTON STREET,
LONDON, E.C.

**CHARLES J. SIMS, MINE OWNER, STOCK AND SHARE
DEALER, 2, DRAPER'S GARDENS, THROGMORTON STREET,**

LONDON, E.C.

(Late of Tavistock, Devon, the centre of the Devon Consols District.)

Special and reliable information and advice on the mines of Devon and Corn-
wall, and of the Llanrwst District.

Twenty-five years experience in Mining.

Special information on Manganese Mines at home and abroad.

All business entrusted to C. J. SIMS will have careful and prompt attention.

**THE IMPORTANT DISCOVERY OF LEAD AT
SOUTH D'ESBY MINE.**

SPECIAL REPORT, by Capt. ABRAHAM FRANCIS, appears in this Journal. The
lode in the mine, stated by Capt. Francis to be worth 2 tons of lead per fathom,
has improved since he was on the mine. These South D'Esby Mine shares are
steadily rising—present price, 35s. per share; they should be bought in large
numbers at this price.

A company, with a capital of £15,000, in 15,000 fully paid shares, is being
formed to work the adjacent mining property which was so favourably noticed
in last week's Journal, and which is situated immediately to the north of South
D'Esby Mine.

Applications for shares should be made at once to
EKINS AND CO., 14, QUEEN VICTORIA STREET, LONDON, E.C.

MR. W. H. H. WATSON, DEALER IN MINE SHARES
at the net market prices of the day.

Address—1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

MR. J. ROSEWARNE, 3, COTHALL BUILDINGS,
LONDON, E.C.

WEST DEVON GREAT CONSOLS.—I have this week again critically in-
spected this valuable property, and have only to confirm what I have previously
stated in these columns. Although the shares have steadily risen, and are now
£3 1/2 to £4, yet it is certain that a considerably higher price will be speedily
attained, seeing the number of lodes in the set, the remarkable character of the
rich gossan on their backs, and the unquestionable importance of the locality,
the River Tamar being the only division between this and the celebrated Devon
Great Consols Mine. Since my return the mine has been inspected by eminent
practical miners on account of influential shareholders, and they fully confirm
all the previous reports. I advise intending investors to visit the property for
themselves, and to lose no time in securing shares. West Devon Consols will, I
firmly believe, be the mining prize of 1880.

**IMPORTANT TO SHAREHOLDERS AND INTENDING
INVESTORS.**

MESSRS. THOMPSON AND SON, 14, OLD TOWN STREET,
PLYMOUTH, in their publication, “SOW AND REAP,” point out the
most desirable and profitable investments for money. Sent post free on applica-
tion. The May number is now in the Press.

The Fortescue (Stannagwyn) shares should be bought at once.

FRANCIS FRANCIS,
MINING ENGINEER, STOCK AND SHARE BROKER,
CORN EXCHANGE CHAMBERS, CHESTER.

FOR INFORMATION concerning latest development of the HALKYN DISTRICT
MINES DRAINAGE COMPANY, presided over by HIS GRACE THE
DUKE OF WESTMINSTER, and now being successfully prosecuted for the
purpose of draining, by means of Adit Levels or Tunnels, some of THE RICHEST
AND MOST RENOWNED MINES IN THIS COUNTRY (safe, and, it is be-
lieved, unequalled Investments); also for information concerning PITANGUI,
SANTA BARBARA, and other Brazilian Gold Mines, offering indubitable pros-
pects of success.—Apply to above.

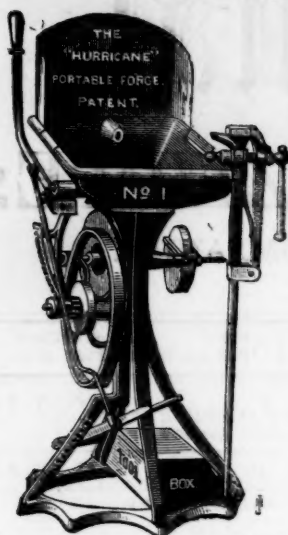
MR. JOHN L. M. FRASER,
(Forty-four Years at the Great Miners' Office)
CONSULTING MINING ENGINEER, &c.,
GREENFIELD HOUSE, WREXHAM.

Mines managed and Secretaried from £150 per annum. Inspections from
£3 3s., and expenses.

All descriptions of MINING PLANT and STORES at the lowest possible prices.
Enquiries courted.

PROFITABLE INVESTMENT, estimated to yield 25 per cent. per annum, and
increase in value 300 to 500 per cent. **BRITISH SILVER-LEAD MINES:** Large
bodies of rich silver-lead and blende ores proved in Eastern shaft, and for several
hundred yards west. Only a few shares at £2 1/2 each ON SALE. Report of Capt.
A. Francis, Gwynnynydd Mines, and all information on application.

A COMPLETE, PORTABLE, AND EFFICIENT SMITHY FOR £7 7s.



THE "HURRICANE" PORTABLE FORGE

(HARDINGE'S PATENT).

A Complete
and
Portable Smithy,
possessing a
Powerful Blast,
a Forge,
a Hearth,
a Vice,
an Anvil,
a Rivetter's Hearth,



a Brazier's Hearth,
a Mine Ventilating Apparatus,
a Tool Grinder (Emery),
a Cutter,
a Circular Saw and Bench,
a Polishing Wheel,
a Chuck,
Two Drills,
a Drill Rest,
and a Tool Box.



PATENTED IN EUROPE AND AMERICA.

The "HURRICANE" Patent Portable Forges possess advantages unobtainable with Forges of any other description. They commend themselves to the world, not only as being complete and portable Smithies and mine and ship ventilators of the highest practical value, but also for the extreme ease with which they are worked, the simplicity and compactness of their construction, and the steady continuous blast, which speedily creates an unusually high degree of heat. The "Hurricane" Portable Forges are made in nine distinct sizes, embrace attachments which form a complete smithy, and are suitable for all purposes in all climates.

The Rivetter's Hearth is readily connected to the nozzle of the forge by means of a flexible tube, and can be used in any awkward position for keeping rivets hot and close to the work. The Brazier's Hearth is similarly worked, but is constructed with a nozzle on opposite sides for producing heat equally on both sides of the work, and is particularly adapted for brazing band saws, &c. Hand Blowers for all ventilating purposes, and for fixed blacksmiths' hearths, are made on a new principle.

The Lever Handle can be used at any angle, or taken off altogether, and the Treadle used instead. There is a Recovering Spring to raise the Handle or Treadle. This arrangement secures all the easy motion of the old-fashioned bellows, is worked with much less effort than the Rotary Hand Wheel, and there are no Leather Bands to be burnt, no Cranks, and consequently no "Dead Centres." Three larger sizes than those given below are kept in stock.

A 1-INCH BAR OF IRON CAN BE RAISED TO A WELDING HEAT IN TWO-AND-A-HALF MINUTES.

PRICES.

No. 0.—THE AMATEURS', JEWELLERS', OR DENTISTS' FORGE AND WORKSHOP, 3 ft. by 1 ft. 6 in., and 2 ft. 8 in. high, fitted as a complete Smithy, including Forge, 6-in. patent Fan Blast, Hearth, Parallel, Vice with Anvil, Emery Wheel, Chuck, 2 Drills, a Cutter, Polishing Wheel, Crucible and Tongs, Ladle, Spanners, Drawers, Treadle and Flexible Band, Automatic Clutch, &c., &c. Weight, 84 lbs. Muffler, for conveying the smoke to chimney, 15s. extra.....	£8 8s. Od.
No. 1.—FORGE, HEARTH (lined with fire-brick), and PAN 18 in. square, 2 ft. 7 in. high. Weight 132 lbs., with 8-in. patent Fan Blast, Spanners, and Emery Tool Grinder, complete, on standard.....	£5 15s. Od.
<i>If also fitted with a 2½-inch Vice and Anvil combined 25s. extra. Muffler, 15s. extra. Extra friction wheels, 1s. each.</i>	
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No. 3.—FORGE AND HEARTH, 26 in. by 34 in. Weight, 160 lbs.: 10-in. patent Fan Blast, Spanners, and 5-in. Emery Wheel, complete on frame with four legs and two travelling wheels. Lever and Treadle.....	£8 8s. Od.
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No. 4.—DITTO DITTO. Weight, 184 lbs. Fitted with Two Travelling Wheels, 5-in. Circular Saw and Bench, and all the attachments of No. 2 Forge, but increased in suitable proportions. Hood, 21s. extra. Muffler, 35s. extra.....	£10 10s. Od.
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2.—The produce from these mines has yielded 42 per cent. of sulphur and 24 per cent. of copper, and their productive capacity has been estimated at 50,000 tons a year when laid open on the scale contemplated by this company, the net revenue from which will, it is calculated from the prices now offered for the output of the mines, be equal to about 24 per cent. per annum on the capital of the company.

3.—The profitable character of this class of investment may be estimated from the fact that a similar and old-established company has paid to its shareholders dividends as high as, if not exceeding, 40 per cent. per annum, in addition to a royalty which was equal to another 6 per cent. on a capital of nearly one million sterling, and its £10 fully paid up shares now stand at a market value of £29 per share.

4.—The property to be acquired by the company possesses all the elements necessary to render it a permanent commercial success, proportionate to its extent and the quantity of mineral it contains, and it has advantages over similar undertakings, consisting in its being nearly 300 miles nearer the English markets, by which at least 5s. per ton is saved in freight alone, and the mineral being above water level, it can be worked and the mines laid open without the aid of expensive machinery and steam power, while the cost of conveying the ore to the port of shipment is moderate.

5.—It is well known that these are matters of a very important character, involving, as they do to a large extent, the success of such an enterprise, and when it is stated that the property is held entirely free from all royalties (which in the case of the company above alluded to have amounted to over £60,000 a year), the only charge or contribution to which it is subject being less than £10 per annum, the prosperity of the undertaking may be regarded with confidence.

6.—The company purposes opening up and developing the mines on a much larger scale than has been hitherto contemplated, with a view of realising the utmost profits they are capable of yielding; and with this object provision has been made for ample working capital. It may be also stated that the company has received an offer from a house of good standing to purchase the entire output of mineral at prices upon which the above-mentioned probable profits are founded.

7.—In referring to the two existing companies of this kind, and the enhanced value of copper pyrites, the following information may be interesting:

The Rio Tinto Company (Limited) has a total capital in shares and obligations of about six millions and a half. Its £10 shares stood at a market value on the 1st February, 1879, of £2 15s. per share, and are now at £12 per share, thus showing a rise of £9 5s. per share.

The Tharsis Sulphur and Copper Company (Limited) has a total capital of about one million and a half. Its £10 shares are now at £29 per share, or 190 per cent. premium on the par or original issue price of the shares.

The Anglo-Espana Company (Limited), having a total capital of £150,000 only, no royalties nor obligations of any kind, no expensive machinery or steam power to provide, in order to develop its properties, now offers the above issue of shares at par.

8.—The mines, which are held in perpetuity, being thereby equal to freehold, together with the buildings, plant, and tools thereon, with the concessions and all interest therein, will be transferred to the company under a contract which has been entered into between the New Tharsis Sulphur Company (Limited), of the one part, and Ernest George Fellows as trustee for and on behalf of the company of the other part, dated the 11th day of March, 1880, and which can be seen at the offices of the solicitors. This is the only contract entered into by or on behalf of the company.

9.—Applications for shares may be made on the form accompanying the prospectus, or briefly by letter, in terms of the prospectus, and sent to the secretary, at the offices of the company in London, from whom any information may be obtained. London, E.C., May 15th, 1880.

THE ANGLO-ESPANA COMPANY, LIMITED.

APPLICATIONS for the ABOVE SHARES will be DEALT WITH in the ORDER in which they are RECEIVED.

Registration of New Companies.

The following joint-stock companies have been duly registered:—

JOSEPH HEAWOOD (Limited).—Capital 20,000*l.*, in shares of 10*l.* To take on lease the mills situate at Reddish, with plant, appurtenances, &c., and to carry on the business of cotton spinning, &c. The subscribers (who take 10 shares each) are—F. Wilkinson, Manchester; F. Higgins, Manchester; J. Hill, Manchester; G. Moir, Manchester; J. Wilkinson, Manchester; A. Higgins, Salford; E. Hurdon, Stockport; P. Crane, Manchester.

THE METROPOLITAN AND PROVINCIAL LAND CORPORATION (Limited).—Capital 50,000*l.*, in shares of 5*l.* and 10*l.* To buy, sell, and deal in land at home and abroad. The subscribers (who take one share each) are—F. Mickleham, 235, Eversley-road; W. Lichfield, 23, Burnt Ash Hill; H. Franks, Manchester; H. Elliott, Haverstock Hill; C. Louis, Junior United Service Club; H. Longdale, 1, Lincoln's Inn Fields; W. F. Nuthall, Oriental Club.

THE WEMYSS MINE (Limited).—Capital 25,000*l.*, in shares of 20*l.* To adopt and carry into effect an agreement made between S. Fifth and R. Henderson on the one part, and D. Hughes as trustee for the company for the other part, for the purchase of the lease of the mines of lead, copper, and other minerals, situate in the parish of Llanfihangel-y-Creiddin, in the county of Cardigan, containing about 263 acres, known as the Cwymyddion Estate. To work the said or any other mining properties, to search for, raise, and get the copper and other ores and minerals, and to crush, smelt, dress, and prepare them for the market. The subscribers (who take one share each) are C. Ball, 5, Fenchurch-street, C.E.; D. Hughes, 8, Gray's Inn-road, accountant; R. T. Strandman, 58, Lombard-street, manager; W. F. Gillham, 44, Essex-street, engineer; E. Power, Highbury, barrister; J. Lambert, Barnsbury, clerk; S. Firth, 37, Gracechurch-street, engineer.

CANTERBURY THEATRE OF VARIETIES (Limited).—Capital 20,000*l.*, in shares of 10*l.* To acquire the Canterbury, and carry on the business of public entertainers. The subscribers (who take one share each) are—J. Pittman, 60, Devonshire-street; W. W. Knollys, 102, Belgrave-road; A. S. Gilbert, 28, Southampton-street; J. R. Pearson, Surbiton; J. W. Wright, Shepherd's Bush; G. Bond, 22, Millbrook; C. Landon, Chiswick.

THE ZOEDONE COMPANY (Limited).—Capital 100,000*l.*, in shares of 1*l.* To use or dispose of certain patents and inventions enumerated in a contract entered into. The subscribers (who take one share each) are—J. E. Hodges, 25, Abchurch-lane; E. R. Phillpotts, 71, Elizabeth-street; A. Sullivan, Grove Hill-road; T. Comber, East Grimstead; A. S. Hoge, Kingston-on-Thames; G. Parker, Highgate; C. W. Turner, Wandsworth.

LONDON MUTUAL BANKING COMPANY (Limited).—Capital 100,000*l.*, in shares of 5*l.* To carry on the business of bankers, and land, building, and investment society. The subscribers (who take one share each) are—J. Roberts, 2, Mortimer-road; T. Archer, Hackney; B. M. Goldhill, 17, Houndsditch; A. Jukes, South Tottenham; J. C. Hester, 1, Moorgate-street; W. T. Butterfield, 24, Brown-street; C. Gostich, St. Albans.

NATHANIEL HOLMES AND PARTNERS (Limited).—Capital 18,000*l.*, in shares of 100*l.* To manufacture and sell chlorozone and chemical products. The subscribers (who take one share each) are—A. K. Mackinnon, 22, Norfolk-terrace; N. J. Holmes, Primrose Hill; A. Granger, 3, Adelphi-terrace; C. T. Sparks, Brixton; P. R. Turres, Junior United Service Club; J. N. Lock, Earl's-court; W. W. Knollys, 102, Belgrave-road.

THE MOSTYN CONSOLS SILVER-LEAD MINING COMPANY (Limited).—Capital 20,000*l.*, in shares of 1*l.* To purchase or otherwise acquire any mines or mineral properties situate in Sloc, and the exploring, working, and carrying on of mining operations, more particularly for working the Mostyn Consols Mines, situate in the parish of Whitford, county of Flint, and carrying on the business of miners, smelters, crushers, &c., in all their branches. The subscribers are—J. Burness, Hulme, carrier, 1000; M. Robinson, Appleby, farmer, 1000; W. Furness, Temple Sowerby, coffee merchant, 1000; J. Woolcock, Holywell, mining engineer, 200; J. R. Furness, Stretford, cashier, 1000; F. Dawson, Manchester, commission agent, 25; W. Poole, Manchester, accountant, 25.

THE WEST OF ENGLAND IRON ORE COMPANY (Limited).—Capital 15,000*l.*, in shares of 5*l.* To acquire by purchase from the Retew Iron Mining Company, for the sum of 3000*l.* in fully paid-up shares of the licenses (for 21 years) of the Retew and Little Trewheela Mines, situate in the parish of St. Enoder, Cornwall, together with all the works, plant, machinery, stock-in-trade, &c., belonging thereto. The searching for mining, digging, raising, and making marketable iron ore and manganese, and generally to carry on the business of iron ore and manganese producers and merchants. The subscribers (who take one share each) are—J. Fraser, Wolverhampton, M.D.; T. Bantock, Wolverhampton, carrier; B. B. Bantock, Wolverhampton, carrier; N. Price, Wolverhampton, jeweller; G. K. North, Wolverhampton, accountant; W. J. North, Wolverhampton, merchant; J. Bantock, Wolverhampton, carrier. Each director must hold 60 shares, number not to be less than three or more than 15, and power is given to the subscribers to elect three of the number.

WRIGHT AND CHARLTON (Limited).—Capital 10,000*l.*, in shares of 10*l.* To purchase or otherwise acquire the business of tar pavement and asphalt manufacturers, paviors, and contractors, carried on at 171, Queen Victoria-street, Victoria Wharf, Deptford, and at Camberwell, with the goodwill, &c., and continue same. The subscribers (who take one share each) are—G. Gibbens, Sittingbourne; J. S. Wood, 4 and 5, Three Crown-square; P. H. Farrar, Brixton; C. Gould, Lordship-lane; R. E. Haworth, 15, Bishopsgate-street Within; E. W. Gabriel, 12, Dowgate Hill; H. Coghlan, Shepherd's Bush.

THE CHONTALES COMPANY (Limited).—Capital 125,000*l.*, in shares of 1*l.* To adopt and carry into effect a certain agreement made between the Chontales Consolidated Mining Company (Limited) of the first part, J. J. Truran second, and R. Hancock of the third, for the purchase or acquisition of gold and silver and other mines and mineral properties in Nicaragua, or elsewhere, and the carrying on of the business of a mining company in all its branches. The subscribers (who take one share each) are—P. Pittar, 50, Gracechurch-street, merchant; H. W. Noakes, Sutton, cashier; G. Lee,

41, Lothbury, cashier; W. Baxter, Kilburn, gentleman; D. McLine, 2, Angel-court, no occupation; J. R. Walker, Stock Exchange, shareholder; C. Ebenezer, 19, Laurence Pountney-lane, merchant. The first directors are—Earl Nelson, Messrs. Pittar, Baxter, and C. S. Hill, the maximum number being fixed at seven. Qualification, 400 shares.

NEW FLAGSTAFF CONSOLIDATED SILVER MINING COMPANY (Limited).—Capital 80,000*l.*, in shares of 1*l.* To acquire by purchase certain mining properties situate in Little and Big Cottonwood District, Salt Lake Country, Territory of Utah, known as Flagstaff Mine, Virginia Mine, the South Star and Titus Mines, the Nabob Mine, and the Fleetwood Mine, and any other similar properties in the United States. To develop and work said or any other mines, and to crush, smelt, and prepare the ores therefrom, and otherwise render marketable the produce. The subscribers (who take one share each) are—J. Walker, Croydon, gentleman; W. H. Rowe, Watford, merchant; G. G. L. Macpherson, 5, Craven Hill, merchant; R. St. Stephens, 301, Victoria Park-road, mining engineer; A. A. de Metz, 6, Great Winchester-street, accountant; J. R. Coombs, 14, Great Winchester-street, secretary; G. E. Ashburner, 25, Carlton-road, Major-General. The subscribers will appoint the first directors, whose qualification is fixed at 100 shares.

PROVINCIAL STOCK AND SHARE MARKETS.

CORNISH SHARE MARKET.—Mr. M. W. BAWDEN, mine shareholder, Liskeard (May 20), writes:—The mining market continues dull and inactive. The Whitsun recess and the Royal visit to the Cornish City has temporarily suspended most business. Subjoined are the closing quotations:—Bedford United, 3½ to 7½; Carn Brea, 77 to 78; Clitters, 4½ to 4½; Cook's Kitchen, 8½ to 8½; Dolcoath, 54 to 55; Devon Consols, 12½ to 13; East Caradon, 2½ to 2½; East Buller, 1½ to 2; East Pool, 31 to 32; Glasgow Caradon, 1½ to 1½; Herodsfoot, 3½ to 4; Hingston Down, 1 to 1½; Marke Valley, 2 to 2½; Phoenix, 5 to 5½; South Caradon, 120 to 122½; South Condurow, 10½ to 11; South Crofty, 14½ to 15; South Frances, 17 to 17½; Tincroft, 17½ to 18; West Basset, 17½ to 18; West Caradon, 2½ to 2½; West Frances, 16½ to 17; West Mary Ann, 1½ to 1½; West Phoenix, 2½ to 2½; West Tolgus, 57 to 58; Wheal Agar, 7 to 7½; Wheal Basset, 4 to 4½; Wheal Crebor, 4 to 4½; Wheal Kitty, 5½ to 5½; Wheal Jane, 4 to 4½; Wheal Pevor, 27 to 28; Wheal Uny, 4½ to 4½.

MANCHESTER.—Messrs. JOSEPH R. and W. P. BAINES, share brokers, Queen's Chambers, Market-street (May 20), write:—In consequence of the suspension of business during Whitsun week having become so general in this neighbourhood, a "report" is almost out of question. Some business, however, has been got at, and to a fair amount, considering the time. Tuesday is the only day in the week in which full business hours are observed, and on that day several dealings were had, though they were solitary, and did not show any great tendency in either direction, except in rails, which have been moving in the same direction for some days. Indeed, the only concern in which anything like a reliable market has been had. Banks and Insurance are just steady, and Coal, Iron, &c., inactive. Spinning and Manufacturing were rather stronger in tone on Tuesday, but very little business has as yet been marked in them. The prospect of a return to work of the weavers who "struck" lately, at an earlier date than we said last week was anticipated, has had a hardening effect on these securities, and with a full resumption of work the downward tendency of the past few weeks will doubtless be arrested. Home Railways are generally lower, though traffic are generally considered fairly satisfactory. In Canadian Trunks have been very flat all the week, particularly the Third Pref., which marked a considerable fall. The traffic announced to-day, 10,101 increase, will doubtless cause Trunks of all issues to rally, for the depression seems to have been mainly attributable to "closing" of "bull" accounts. Americans, too, have ruled lower.

HULL.—Mr. W. FOWLER SUTTON, stock and share broker, St. Mary's Chambers (May 20), writes:—Whit week is usually a very quiet one for business, and this one is no exception, except as regards an attempted closing of "bull" accounts yesterday on the Stock Exchange, which produced a severe fall, and a feeling of instability only partially recovered from so far. Traffic were very satisfactory, and advantage was sought to be taken of them to close accounts open for the week, but no buyers being forthcoming, markets gave way solidly, the depression being helped by rumours of failures and prospects of dearer money. Considering the firmness of Consols, the last named element seems remote at present. To-day has seen a general rally, and the tone of the markets is good. Canadian stocks have moved in accord with English rails, and the Trunk traffic to-day (10,101 increase) caused a very smart reaction upwards. On the lower range of prices now ruling it is probable fresh buyers will come forward, and thus initiate a further upward movement. The following comparison may be useful:—Trunk ordinary have been 25½, now 21½; ditto first preference have been 89, now 86½; ditto second preference have been 78, now 70; ditto third preference have been 46, now 38½; Canadians have been 14½, now 12½. Consols remain unaltered on the week. Local stocks unchanged. Quotations are:—Hull Banks, 11½; Yorkshire Banks, 28½; London and Yorkshire Banks, 28; Hull Docks, 92; Ditto Four per Cent. Debentures, 101; Earle's Shipbuilding, 18½; Hull Trams, 9½; Sutton Gas, 13; Kingston Cotton Mill Ten per Cent. Preference, 7.

CHESTER.—Mr. FRANCIS FRANCIS, stock and share broker, Corn Exchange Chambers (May 20), writes:—The best local stocks, in spite of low prices in the metal market, are very firmly held, most holders refusing to sell at present quotations. Halkyn District Drainage shares, 10 to 11; Rhydalun, 10 to 11; Rhosmor, 3 to 4; North Hendre, 6 to 6½; Pen-y-Orsedd, 1 to 1½; Deep Level (new shares), 1 to 1½; Mynbwl, par to ½ prem.; Gwern-y-Mynydd, 5½ to 5½; Pant-y-Myn, at par; Gorsedd and Merlyn Consols, 2 to 2½. Of foreign mining shares locally dealt in Pitangul (gold) keeps to the front at 2½ to 3½; St. John del Rey, 215 to 225; Santa Barbara, 2 to 2½; Brazilian Gold Mines, 1¼ to 1½; Copago, 8½ to 9½. The important piece of information concerning drainage this week, and equally affecting local estimation of the Rhydalun stock, is the drying up of a strong spring in the Rhydymwyn valley, about 300 yards north of the Rhydalun boundary, which has never before been dry. This shows the influence of the drainage to be rapidly extending in this direction. Mr. Walter Eddy has been down Rhydalun and Rhosmor, and reported very favourably of both. At 30s. each my recommendation of Rhosmor share was regarded somewhat timidly, but at 3½ 10s. buyers are bold. Drainage, Rhydalun, and Rhosmor shares are bound to go much higher. St. John del Rey shares are gradually recovering from the unwarranted scare of last week.

SCOTCH MINING AND INDUSTRIAL COMPANIES SHARE MARKETS.

STIRLING.—Mr. J. GRANT MACLEAN, sharebroker and ironbroker (May 20), writes:—During the past week business has again been quiet, and prices have been depressed through sales by speculators for the rise. That a real revival in trade has undoubtedly commenced which the fine weather, easy money market, moderate price of commodities, and other favourable circumstances should encourage is not to be doubted; but in the mean time a speculative reaction is in full force, and no improvement in prices can be established until it is exhausted.

In shares of coal, iron, and steel companies the only improvement in the week is 2s. per share on Clyde Coal, the other movements being all downward. The reductions comprise 5*l.* per share on Shotts Iron, 10*l.* each on Bolckow, Vaughan, A. and Marbella Iron, 8*l.* 8*l.* on Steel Company of Scotland, 5*l.* on Ebbw Vale, 4*l.* 6*l.* on Monkland, 4*l.* on Glasgow Port Washington, 2*l.* 6*l.* each on Benhar and Scottish Australian, 1*l.* 3*l.* on Monkland pref., and 1*l.* on Omoia and Cleland. The iron market has been steady, mainly owing to the buying of one or two merchants, who seem to wish to get into stock at present prices; but outside of the market things continue very dull. The cream of the American shipments being over, stocks are again accumulating, and no prospect of being made lighter. The highest price of the week has been 46s. 6*d.*, but yesterday a drop took place to 45s. 9*d.*, on a reduction of 6*d.* per day being announced on the miners' wages. Benhar Coal shares have declined from 43s. to 40s. Ashton Vale Iron are at 8*l.* Andrew Knowles and Sons, 12*l.* 12*l.*; Bolckow, Vaughan, A. 77½ to 78; ditto stock, 131 to 132; and ditto preference, 39½; Cardiff and Swansea, 50s. to 60s.; Chatterley Iron, 7*l.* 8*l.*; Chillington, 7*l.* 6*l.*; Charles Cammell and Company, 8½*l.*; Clyde Coal, 50s. to 55s.; Ebbw Vale, 10*l.* 10*l.*; Great Western, 8*l.* 8*l.*; Henry Briggs, A. 12½; John Bagnall and Sons, 15*l.* 15*l.* 15*l.* per share on Clyde Coal, the other movements being all downward. The reductions comprise 5*l.* per share on Shotts Iron, 10*l.* each on Bolckow, Vaughan, A. and Marbella Iron, 8*l.* 8*l.* on Steel Company of Scotland, 5*l.* on Ebbw Vale, 4*l.* 6*l.* on Monkland, 4*l.* on Glasgow Port Washington, 2*l.* 6*l.* each on Benhar and Scottish Australian, 1*l.* 3*l.* on Monkland pref., and 1*l.* on Omoia and Cleland. 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don, 50s. to 60s.; West Basset, 19; Wicklow Copper, 7s. to 9s.; Wheal Owles, 7s.; Wheal Ag, 7s.; and Wheal Grenville, 9s.

In shares of gold and silver mines, business has been quieter. Prices are generally lower, except Richmond, which have advanced 7s. 6d. This week's run is \$70,000, and their net profits for the last year have been at the rate of about 50 per cent. on the capital. The first annual meeting of the Rio Grande do Sul Brazil Company is to be held on June 2. Two new companies are to be announced very soon. Almada, 12s. 6d.; Australasian Mines, 5s.; Cedar Creek, 1s. to 2s.; Colorado, 4s. 9d.; Consolidated, 15s. to 20s.; Don Pedro, 15s.; Emma, 7s. 6d. to 12s. 6d.; Eberhard, 7s. 9d.; Eschweiler, 9s. 3d.; Flagstaff, 15s. to 17s. 6d.; Frontino, 7s. 6d.; Glenrock, 30s. to 32s. 6d.; I. L. L., 10s.; Kapanga, 22s. 6d. to 27s. 6d.; London and California, 7s. 6d. to 12s. 6d.; Last Chance, 5s.; Mineral Point, 40s.; Pestarena, 5s. to 7s. 6d.; Port Phillip, 10s. to 12s.; Rossa Grande, 4s. 6d.; Santa Barbara, 38s. to 40s.; and Tecoma, 3s. 9d. to 5s.

In shares of oil companies, prices are generally lower. Uphall are reduced 5s. and Oakbank 1s. 6d. Young Paraffin, after improving to 11½, have relapsed to last week's price—10½. Runcorn Soap and Alkali, 10s. 6d. to par.

In shares of miscellaneous companies, there is no particular change to notice. Avonside Engine, 47s. 6d. dis.; Birmingham and Midland Counties Val de Travers, 11s. 3d.; Native Guano, 90s.; Neuchatel Asphalt, 12s. 6d. to 15s. Phospho-Guano, 4 to 5. Prices of wagon companies shares are—Bristol, 30 dis.; Bristol and South Wales, 47s. 6d. prem.; Birmingham, 15½; Gloucester, 9½; Metropolitan, 60s. prem.; Midland, 11; Railway Carriage, 85s.; Railway Rolling Stock, 75½; Scottish, 9½; Swansea, 60s.; Western, 65s.; United States Rolling Stock, 15½ to 19½. Prices of chemical companies shares are—Langdales, 55s. 9d.; Lawes, 5½ to 6; and Newcastle, 90s. to 95s.

WHEAL FORTUNE MINING COMPANY (Limited).—This company is formed to purchase and work the mine known as "The Queen Silver Mine," containing an area of 150 acres, situated at Harrowbarrow, parish of Calstock, Cornwall. The mine consists of three lodes, which all form a junction in depth, and which towards the west are intersected by a cross-course. The most southerly of these lodes has proved very productive for copper and arsenic, while both of the others are true silver lodes, one of which is the famous Wheal Brothers lode, which yielded large quantities of silver ore in the Wheal Brothers, Prince of Wales, and Queen Mines, the latter being now included in the Wheal Fortune. The other is known as the Well lode, and is a continuation of the vein which in the Wheal Mexico East Cornwall, and Wheal Langford Mines to the west, contained the richest deposit of silver ever worked in the United Kingdom. There are, therefore, prospects of rich discoveries, but it must be borne in mind that the ground already laid open is for hundreds of fathoms capable of being worked to a profit. The existing reserves of ore fit for concentration are estimated to produce about 30,000 ozs. of silver, of which about 10,000 ozs. will be available for dividends. It should be noted that the mine is very cheaply worked, the total expenses for pumping and hauling being only about 20s. per month. The capital is \$5000, in shares of 1s. each.

PIERREFITTE MINING COMPANY (Limited).—It is expected that reports of this company will appear in the *Mining Journal* regularly. At present preparations for commencing work on a large scale are being rapidly pushed forward at the mines, and the captain, who is now on the spot, is busily engaged in organising an efficient staff of miners, and in a short time it is expected that large returns of ore will be made. There have been since about the beginning of the year a few men at work extracting the ore, which will shortly be put into the market.

BROXBURN OIL COMPANY (Limited).—At the third annual meeting of this company the Chairman stated the profits last year from the refinery amounted to 31,175s., and from the ammonia to 12,436s. As showing the importance of the method of working adopted, the gross sales showed that 31.55 per cent. had been realised from burning oil, 23.20 per cent. from lubricating oil, and 45.25 per cent. from paraffin scale, which proved that the company had not to depend on burning oil. In addition to this, a profit of 2s. 1½d. per ton of shale had been got from the ammonia. The power of the works was very much increased, and a very small amount charged to capital. The capacities of both the crude work and refinery had been increased by 120 tons shale per day, or 720 tons a week, at a cost of capital of 12,638s. The expenses for conducting the business of the company, including directors' fees, salaries, and commission, was 2½ per cent. on the turn-over, and the debt to ½ per cent., the gross sales amounting to 155,000s. A sum of between 5000s. and 8000s. of cost of maintenance had been charged to revenue, which in the case of all other companies was laid against capital. Referring to the action pending in the Court of Session with the Benhar Coal Company, the directors believed it would result in their favour, but if not the company would be no worse off than at present. As to the future, after making a careful survey of the company's position, and taking into account the increased capacities of the works, the contracts already effected, together with the profit expected to be derived from refining paraffin on the one hand, and making allowance for the decrease which had taken place in the value of mineral oil products on the other hand, the directors anticipate for the year now current no less favourable results than those they had satisfaction of reporting for the past year.

GLASGOW CARADON CONSOLIDATED MINING COMPANY (Limited).—The sale of 150 tons copper ore by this company on the 19th inst. realised 550s. 1s., or an average of 73s. 4d. per ton, and compares with 160 tons at 97s. 7d. last month, while the sales in the month of May for some years previously have been:—In 1870, 190 tons, at an average of 79s. 8d.; in 1872, 240 tons, at 99s. 9½d.; in 1877, 240 tons, at 94s.; in 1878, 240 tons, at 99s. 9½d.; in 1879, 240 tons, at 118s. 5d.; in 1874, 250 tons, at 93s. This is the company's fifth sale for the current financial year, and the total proceeds of these sales, as compared with those for the same period last year, show a decrease of 119s., but 165 tons less ore have been sold this year.

CARDIFF AND SWANSEA SMOKELESS STEAM COAL COMPANY (Limited).—This company has just struck a new seam of steam coal, 3 ft. 9 in. thick, under their Resolven property, which extends over 3000 acres. The seam is of excellent quality, and can be worked cheaply, the top being solid rock, which is a great advantage as regards economical working.

NORTH BUSY MINE.—The fall in these shares is entirely due to the fall in the price of tin. They sold 200 tons of tinstone last week (being about five weeks' produce) for 312s. In addition, they have all the best work, valued at about 150s., reserved for an advance in tin. The costs are about 200s. a month.

WICKLOW COPPER MINE.—The present depression in the price of these shares is merely in sympathy with the depreciation at present existing in all metal and mineral companies dealt in on the English and Scotch markets. It is not unlikely that during the summer months the shares will recover.

EDINBURGH.—Messrs. THOMAS MILLER and SONS, stock and share-brokers, Princes-street (May 20) write:—There has been great depression in the markets for railway stocks and mining shares. Home railways are all lower, and Canadians have had a sharp fall. Americans are also depressed. Since Thursday last Canadian Copper have fallen from 42s. to 30s.; Marbella from 57s. 6d. to 49s.; Tharsis from 29½ to 29s. Bank stocks continue firm.

IRISH MINING AND MISCELLANEOUS COMPANIES' SHARE MARKET.

DUBLIN, MAY 20.—The Whitsun holidays have naturally interfered with business, and even the changes at the Viceregal Lodge may have had some influence in diverting attention from more important matters. The result is that mines have been almost entirely neglected; in fact, a transaction in Mining Company of Ireland at 2½ may be said to represent about the business of the week. Tramways have been dull and railway very flat, sympathising with the tone of the English markets. Business on quite a small scale. Cork and Brandon was dull, and receded to 99½. Dublin and Wicklow was heavy, and dropped to 95½. Great Northern continues flat, and fell to 122½. Great Southern and Western was fairly steady, at 117. Midland Great Western was weak, and relapsed to 93½. Great Northern Three per Cent. (Dungannon) Preference changed hands at last price, but the lot was small. Great Southern, and Waterford and Limerick Four per Cent. stock repeated 107 and 97 respectively. Dublin and Wicklow Four per Cent. Debenture also repeated previous price, while Great Northern Four per Cent. improved to 105. In Banks Munsters were in fair demand, and new shares, 6s. paid, were dealt in at 6½½. Both Provincial and Royals are easier, receding to 62½ and 29½ respectively. The most satisfactory feature is that the public appear to feel greater confidence than they did, so that when anything really good is offered it is better appreciated.

CORK.—Messrs. J. H. CARROLL and SONS, stock and share-brokers, South Mall (May 20), write:—There has been a relapse in railways during the past week. Great Southern has declined to 117, and Great Northern to 122½ to 123½. Bandons, which reached par, closed to-day at 99½; and a few Passages were done at 11½. Midlands have been firm, and dealt in at 99½ to 99½. In Banks, National's advanced 66½ to 67; but Provincials were weak, and fell away to 62½, 63. Munsters remain firm, at 7½; Cork Steam Packets steady, at 12½ to 12½; Cork Gas shares at 7½ to 7½; Goulding's unchanged, at 8½ to 9, and Daly's, 3 to 3½.

A FOSSIL FOREST.—An interesting discovery has been made at Edge-lane Quarry, Oldham. The quarrymen, in the course of their excavations, have come upon what has been described as a fossil forest. The trees number about 12, and some of them are 2 ft. in diameter. They are in good preservation. The roots can be seen interlacing the rock, and the fronds of the ferns are to be found imprinted on every piece of stone. The discovery has excited much interest in geological circles round Manchester, and the "forest" has been visited by a large number of persons. The trees belong to the middle coal-measure period, although it has been regarded as somewhat remarkable that no coal has been discovered near them. The coal is found about 250 yards beneath. Professor Boyd-Dawkins, of Owens College, has visited the quarry, and declares there is not such a sight in Europe.

Original Correspondence.

BORDEAUX TRAMWAYS.

SIR,—A recent visit to Bordeaux has impressed me with the idea that this is likely to prove one of the best tramway enterprises in Europe, and I would strongly advise all shareholders to do as I have done, as I can assure them that a visit to this prosperous French city will amply reward them for their trouble. I am proud to think that this new enterprise has been established by English capital, and I congratulate my fellow-shareholders upon their prospects.

May 18.

TRAMWAY.

RUBY AND DUNDERBERG CONSOLIDATED.

SIR,—As various attempts are being made to depreciate the property, I think it is only right that the shareholders should be made aware of the fact that the ore in sight is estimated by competent parties to be of the value of 325,000l., and explorations are still going on most satisfactorily, all the way in ore, and similar grade to that of Richmond. Shareholders should also bear in mind that the last weekly return shows an excess of 41 tons of ore over the previous week, and 81 tons over the week previous to that. These facts speak for themselves.

13, Angel-court, Throgmorton-street, London, E.C., May 21.

[For remainder of Original Correspondence see to-day's Supplement.]

Meetings of Public Companies.

CARNARVON COPPER MINING COMPANY.

An ordinary general meeting of shareholders was held at the company's office, Gracechurch-street, yesterday.

Mr. J. Y. WATSON, F.G.S., in the chair.

Mr. C. B. PARRY (the secretary) read the notice calling the meeting. The following report was then read:—

May 18.—In writing a report for your general meeting with regard to the nature of the mine and the prospects in view, I do not know that I can add much to the report which I wrote last November, because nothing has been done in the direction of making discoveries on account of the water not being yet forked out. We started on January 21 to repair the machinery, which had naturally gone very much out of repair in the wooden parts. The water-wheel required new bearings, all the wooden portions of the rods and pulley stands had to be replaced with new, the balance-bob and a horizontal bob had also to be renewed. In the shaft the working barrels of the pumps being idle for so long a time had corroded very much by the acid in the water, and it took some little time before the buckets would stand long, the roughness of the surface tearing away the leather. I expect, however, that by the end of this week the water will be forked to the 70 at Garnon's, and at the new shaft the water is now forked below the bottom of Golden Venture, and as there is not now much space to clear beside the shaft we shall get down at a good speed. I should say that a fortnight or three weeks will drain the new shaft to the bottom. The pumps here are only 4 in. diameter, which accounts for the slow progress we have been making; and at the commencement we had the misfortune to break the rod in the first pump, and we could not get the bucket out, so we had to draw out the water with a barrel. I send with this a plan and section of the mine in order to make it more clear and explicit than words can do. By a reference to them you will see just exactly our position. The new shaft is sunk to the 90, being nearly 19 fms. deeper than the sump at Garnon's. It will be seen that no communication has been made anywhere between the two sections of the mine, and the mine had been so worked that there was no possibility of carrying it on without a new shaft. Garnon's shaft was sunk perpendicular under the lode, which necessitated the driving a long cross-cut at every new level, hence the sinking of the new shaft, which will command the whole of the mine both for pumping and drawing. It will appear by the plan as though the section of ground standing between the Golden Venture and Garnon's was barren and unproductive, but this is a question not yet proved, and I am of opinion that should this be properly tried it will yield just as good bunches of ore as the other parts have done. It seems that the former workers drove the ends in that direction a very little distance beyond the ore. 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mean pressure to the volume of the same when saturated, as 742.5 to 760, or as 1 to 1.42. Since the air which descends the pit will contain more or less moisture, the increase in volume will not be so much, perhaps not 1-60th; hence it is evident how little is the advantage gained by this increase, the difference in weight between the air in the upcast and downcast shafts, due to the upcast containing more moisture.

We have already indicated the effect of varying quantities of moisture in the air with regard to the drying power of the currents, and have only to notice its influence on the health and the working powers of the miner. If the air reaches the point of saturation before leaving the working places, it is evident that it becomes unable to take off any of the moisture from the skin, and the perspiration streams down the bodies of those who are working in such a saturated atmosphere. Under such a condition the tissues become relaxed, and the miner suffers under a greater or less degree of lassitude. Moisture, as is well known, is a very common vehicle in which disease germs are transported. Moreover a miner who has been working six or eight hours continuously in such an atmosphere is more likely to suffer from the change on reaching the surface. On economical grounds alone it is of the greatest importance that the miners should be supplied with cool dry air. By this means the health of the miner is better preserved, and he does not soon become an invalid. This is, irrespective of the extra work a miner will do on account of being supplied with fresh air, of economical importance to the mine owner in Germany, who is required to pay a proportionate levy to the sick and worn out fund.

The thermometer is so well known to the generality of persons that no description of it is here necessary. The influence of change of temperature will, therefore, be discussed afterwards.

THE BAROMETER.—Although the value of this instrument for mines, according to some authorities, has been much exaggerated, it is in the hands of a scientific engineer capable of being of great service in connection with mines. The barometer, as is well known, consists of a glass tube about 33 in. long at the upper end, and connected at the lower end with a reservoir of mercury, exposed to the pressure of the air. The tube is filled nearly to the top with mercury, the space above the mercury in the tube being a vacuum. The pressure of the air supports that of the column of mercury; as the latter becomes less the height of the column of mercury, which is balanced by it, becomes less, and the surface of the mercury sinks in the tube; and as the pressure of the air becomes greater the column of mercury required to balance it becomes greater. The pressure of the air varies between 2000 and 2200 lbs. to the square foot, and corresponding to this height of the mercury column varies between 29½ and 31 ins. Of late years another handier form for use in mines has been invented. This is the aneroid barometer. The principle on which it depends is the multiplication of the slight change of depression of a corrugate plate (forming one side of a flat round hollow box) by means of mechanism similar to that used in steam gauges. A finger, or pointer, fixed to an axis moves about the axis in one direction or other, according as the pressure of the air rises or falls. As this form of barometer is made so that it can be carried in the pocket, it is extremely handy for use underground. In fact, a carefully constructed aneroid barometer could be made so sensitive as to replace the water gauge, with the advantage that it could readily be carried to any portion of the mine, and the resistances encountered by the air current over any given length or district could be readily compared amongst each other, and with the total resistance offered to the air between the downcast and upcast shafts. To do this all that is necessary is to notice the decrease in pressure of the air whilst travelling over any given district of the mine and compare this with the difference of pressure between the air in the downcast and the upcast shafts. By noticing whether the above decrease becomes greater or less it is at once indicated whether the air meets with a greater or less resistance. In a similar manner the aneroid barometer forms a capital instrument for observing the effect of any alteration of splits, or insertion of a new air-crossing or trap door.

According to many persons the most important use of the barometer is to give warning of any liability of an extra inpour of gas, and consequently it has been attempted to account for most explosions by a sudden change in the barometric pressure. This view, though held by many persons, and even to such an extent that the mining laws of most countries require a barometer to be fixed in position near the mine, had always many strenuous opposers, and at the present time the tide of opinion seems to be setting against the view that a change of the barometric pressure has had much to do with explosions; indeed, many scientific engineers state that not only has its importance been vastly exaggerated, but that its observations cannot be relied on for any practical purpose in consequence of its slowness of action. We will now endeavour to explain the arguments that have been brought forward, and the various views that have been taken on this subject.

As above mentioned, the average pressure of the air is balanced by a column of mercury about 29 in. in height, and this corresponds to a pressure of 14.7 lbs. per square inch, hence a variation of 1 in. of the mercury column corresponds to a variation of ½ lb. pressure on the square inch. According to Boyle and Mariotti's law the temperature remaining the same, the volume of a given quantity of gas is inversely as the pressure which it has, hence if the pressure be doubled the volume is reduced to one-half, and if the pressure be halved the volume is doubled.

Again, when gases are heated they expand at a constant ratio for every degree rise of temperature; this ratio is the same for all gases as for air—namely, 1-459th of their volume for a rise of 1° Fahr. scale, or 1-273rd of their volume for a rise of 1° centigrade scale. This co-efficient is the same, whatever the pressure of the gas may be, so long as the pressure is not altered. It must be carefully noted that the starting point, in calculating the expansion produced by any rise of temperature, is at 0° on Fahr. scale. Thus 459 cubic feet of air at 0° Fahr. will expand to 460 cubic feet at 1° Fahr.; to 461 at 2° Fahr., and to 509 cubic feet at 50° Fahr., and to 519 at 60° Fahr. But 459 cubic feet at 50° Fahr. will not expand to 460 cubic feet at 51° Fahr. In order to find the amount to which any given volume of air at a given temperature will expand on being raised to a higher temperature, we have the following simple proportion sum:—The volume at the lower temperature (say, t°) is to its volume at the higher temperature (say, T°) as 1-459 multiplied by the number of degrees of the lower temperature plus 1 is to 1-459 multiplied by the number of degrees of the higher temperature, plus 1. A perhaps simpler way of expressing the above rule is that the volume at the lower temperature (t°) is to its volume at the higher temperature (T°) as 459, plus the number of degrees expressing the lower temperature, is to 459, plus the number of degrees expressing the higher temperature; or—volume at t° : volume at T° : 459 + t° : 459 + T° . This is the most important rule connected with the whole theory of ventilation, and as we shall often have to refer to it we shall speak of it as Gay Lussac's law, after its discoverer. These two laws of Boyle and Mariotti and of Gay Lussac taken together enable us to determine the change in volume of any given quantity of air from one given temperature and pressure to a fresh given temperature and pressure. This may be done by considering first the change in volume owing to a change of pressure (say) from p. inches barometric pressure to P. inches barometric pressure, and then finding the change of the new volume due to the change of temperature; or the question can be solved at once as a compound proportion sum.

The Stock Exchange Committee have appointed Thursday a special settling day in the shares of the South Indian Gold Mining Company (Limited). To be marked.

EPPE'S COCOA—GRATEFUL AND COMFORTING.—"By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well-selected cocoa, Mr. Eppe has provided our breakfast tables with a delicately flavoured beverage which saves us many heavy doctors' bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle maladies are floating around us ready to attack wherever there is a weak point. We may escape many a fatal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame."—Civil Service Gazette.—Sold only in packets labelled—"JAMES EPPE and Co., Homoeopathic Chemists, London."

FOREIGN MINES.

ST. JOHN DEL RIV.—The directors have resolved to recommend at the meeting of the company, to be held on June 30, a dividend at the rate of 12½ per cent. for the half-year.

DON PEDRO.—April 18: The water not being yet in fork, no ore from the mine has been obtained, but the reduction of the attention was called to the various accumulations of sand in that department, and requested to clean up every particle of sand available in and around jiggers, under jigge-wheel, in and around wash-house, &c., and the carpenter for the place to make some urgent repairs about jigger-wheel, shoot, launders, &c., which are being put in good repair, which said repairs will, we hope, be completed about the 20th, by which time we hope to have some ore for treatment. The result of the clean-up will, we hope, prove satisfactory. At the reduction works, jiggers, shoot, launders, &c., were in a very bad condition, and are being put in repair, and cleaned-up all available sand; jigger-wheel, a new gudgeon put in and brasses, driver of handling-machine taken out and replaced by a new one complete. These repairs will be completed by the 20th, and hence, by which time we anticipate having a fair pile of ore for treating; in fact, everything is being done under the circumstances for the company's welfare that we can think of.

SANTA BARBARA (Gold).—Thomas Tregellas, Pari, April 18: During March 914 tons of mineral were stamped, producing 3473 oits. of gold, 38 oits. extracted from scrapings from skins, and 159 oits. obtained from the additional strikes, making a produce of 3670 oits. of gold, or equivalent to 4015 oits. per ton of stone stamped. From the treatment of 52 tons of refuse and 72 oits. were obtained, making a total produce for the month of 3742 oits. of gold, which (valued at 8s. 6d. per oit.) amounts to 15907. 7s. 6d. The estimated working cost for the month (at exchange 23½d.) being 11631. 0s. 9d. leaves an estimated profit of 4277. 6s. 3d. for March. Mr. Tregellas having suffered a severe accident to his arm—from which he is recovering—had been unable to enter the mine for some days, but reports that from samples received from the stamping mills there seems little or no alteration in the quality of the mineral since last reported on. The mine captain reports that the quantity of ore raised during the month amounted to 1188 tons, of which 274 tons were rejected as refuse stone, and 914 tons treated at the stamps. Average quantity of ore raised per borer for the month, 27.5 tons, or per hole bored, 0.528 ton.

PITANGUI.—T. S. Treloar, April 17: Mr. Treloar advises that the two exploratory levels from the 15 are being pushed forward, the one going southward continues dry, but the jacotinga is harder, and not quite so favourable for progress; the drive, however, considering the nature of the force employed, is good; this level commenced so recently as the 9th ult., being already in 30 fms. In the level to the Bahu we are, according to present indications, nearly through the bar of ironstone. The rise from the 20 to the mouth of these levels, referred to in my letter of Feb. 17, has been put up, and now that our English miners are again available for the wet levels, we shall proceed forthwith to drive in the 30 so as to communicate with the shaft for the purposes set forth in my letter above alluded to. The works in the adit and rise have been completed, the wash-house is ready, and the tramroad connecting the latter with the mouth of the adit will be finished to-day; we shall, therefore, resume operations on the Ouro Podre veins the day after to-morrow.

RICHMOND CONSOLIDATED.—Telegram from the mine at Eureka, Nevada: Weekly run, 870,000, from 1000 tons of ore. Refinery, 865,000.

R. Rickard. April 28: I beg to hand to you a report on the different operations for the past week:—The 200 westerly drift has been extended 3 ft., and still in hard limestone. The 200 north-west drift has been advanced 7 ft., without any change to mention. In the end of the main 200 drift we have started to cut out the ore for timber, and it looks very favourable for a good sized ore body; an excavation over 14 ft. square has been made with ore still in top, bottom, and sides. The 400 north from No. 11 chamber has been extended only 1 ft.; work in this drift will be suspended until the men get to rise in some favourable ground passed through. As soon as this is explored work will be resumed in the drift. The 400 north from No. 15 chamber has been drifted 17 ft. in very favourable ground for ore. The 500 north from No. 12 chamber, has been extended 7 ft., in very favourable ground. We have started to cross-cut from the end of this drift to the south, where there are very favourable indications for striking ore. The drift from the rise in the back of No. 14 chamber has been extended 17 ft., 10 ft. of which is in ore, and looks very favourable to open to an adit. The drift from the rise in the back of No. 14 chamber has been extended 17 ft., and the men put to bring up the timber from the chamber below. The 600 west drift has been extended 15 ft., without any change to mention. The 600 N. 1 cross-cut, west from south fissure drift, has been advanced 7 ft. in hard limestone. The 600 drift north from No. 2 cross-cut has been extended 20 ft., in very favourable looking ground for ore. The 800 rise is up a total height of 16 ft. We expect to make connection with the winze sunk below the 600 in the course of one month, when exploration drifts will be started from the winze. There are no drifts in the 300 level. The 300 ft. cross-cut has advanced 40 ft., and now in 70 ft. At the 350 ft. level we have advanced 10 ft., but the ore does not look as well as when last reported sent. The weather and roads so bad that we have not been able to ship as much ore as usual, but have about 50 tons down and 50 tons in the dump at the mine ready for shipment. We have 24 men at work, four contractors and six men working on tribute.—El Dorado: I visited the El Dorado Mine on Monday, and find the prospects good.

—Telegram from Eureka, dated May 20: The ore smelted during the week was 55 tons, and produced net \$25 per ton. The quantity of ore at the furnaces ready for smelting is 56 tons.

CONNOLLY.—John Potter, April 26: The late heavy snowstorms have prevented any shipment of ore during the past week, and from the present condition of the roads it is likely the teams will not be able to go up for another week. —Upper Works: The body of iron mentioned in my last letter, which was being drifted through, is now improving on the face—a small vein of quartz has come in running parallel on the hanging-side of the iron, which may carry us to a deposit. A drift is now being run at the 150 ft. level to intersect the ore body developed in the quartz, and low road is being tapped to-day, which is an important discovery. If the lead continues to connect with the branch above there is room for extensive deposits in virgin ground. The 180 ft. level has been cleared out, and the work of opening up on the ledge resumed again within the last few days. Indications are good to develop a body of ore at any time. Some fine quartz now in sight. A drift is been run on the 230 ft. level with a view of cutting the vein (followed in upraise) on the dip. At present this drift is in conglomerate gravel. No ore in sight.

JAYAL.—April 6: Notwithstanding the good prospects held out in our last issue, our misfortune to send you a bad mine; this was partly due to the Easter holidays, during which you had no workmen, and also due to the extreme hardness of the quartz, which for some months past has hindered our grinding the usual quantity. As the holidays commenced on the 24th we stopped the mill and cleared up; this work, together with all necessary repairs, was concluded by the 31st, so that we recommenced grinding on April 1. The benefit of this will, of course, be realised this month, and, therefore, we feel justified in promising you a far better remittance by the May mail. For the past two months the quantity of the quartz has been greatly improving, and we have not the slightest doubt of our again soon being on the old footing. The reduction process is the same, and (if anything) is carried out more carefully than before. No one could possibly feel more anxious to improve the company's position than ourselves, and we assure you that the slightest means of working which would give us more gold would be taken hold of immediately.

Mine: Forty-eight vases have been driven in the mine. The remainder of the quartz crushed was taken as usual from the manto and deposits. We are now working in the 300 level, and the quantity of deer ground is being increased, so that nothing of value can be obtained. In consequence we have not yet struck the lode, but expect to do so in the course of the month; the prospects there are still very good.—Mill and Remittance: The mill with 25 stamps worked 17 days, crushing 1064 tons of quartz, which yielded 235½ ozs. of gold, making an average of 4 dwt. 10½ grs. per ton. Everything is in thorough order both in the mill and engine. We have just placed the new pump to the boiler. The supply of firewood will not fall off, although at the beginning we had some difficulty on account of the bad roads. These we have now repaired at our own cost.

Tailing Mill: This mill treated 92 tons of tailings, which yielded 16 ozs. of gold, an average 3 dwt. 11½ grs. The suggestion to erect Cornish buddles for concentration will be taken into consideration as soon as we have an answer from San Francisco about repairing our old Hungerford concentrators. Expenditure for the month was 7597. 18s. 11d. Remittance is valued at 6007., thus leaving a balance loss of 1591. 16s. 11d. The health of the district seems to be improving.

CAPE COPPER.—Capt. Henwood and Lanksbury, March 31: OOKIEP: The new shaftmen are engaged in cutting top and trip flats in the 80; when completed we would recommend to sink the new shaft deep enough for a 105 fm. level. The east of new shaft, if not made of unproductive ground, which has caused us to suspend it for a time. The 92, north-east of new shaft, is worth 7 tons of copper ore per fathom; we have also started to cross-cut south, opposite the mouth of this driving, in order to prove the run of the productive ground; this level produces 8 tons of copper ore per fathom. The ground in the 80, east of new shaft, is not quite so rich for copper ore; the present end yields 4 tons. The 80, north-east of No. 31 winze, having reached the unproductive ground we have suspended it, and put the men to cross-cut east towards the new shaft; we have also commenced to sink a 105 fm. level. The bottom of this level to prove the ore ground in depth. The 58, south of new shaft is looking very promising. The ground in the 68, south of No. 31 winze, is very changeable. One part of the month it was worth 4 tons of copper ore per fathom; the present forecast is unproductive. The 68, east of No. 32 winze, is still worth 4 tons of copper ore per fathom. In the 58 south-west we have not yet intersected the western flookan-course, nor anything of value; the ground is still massive quartz. The stopes throughout the mine continue to look well.

SPECTAKEL.—Capt. Henwood and Lanksbury, March 25: The 64, south of incline, is spare for driving, and the same level, north of the winze, towards the incline, is still unproductive; the ground generally in these levels is composed of hard crystalline rock. The driving the 64, east of winze, has been resumed, in order to prove the copper-bearing ground in the bottom of the 53 fm. level, which apparently is dipping in this direction. The ground in the 53, south of east level, having become less congenial for copper ore has been suspended. The

stopes in the bottom of the 53 has improved in depth, now producing 5 tons of copper ore per fathom.

SABABEEP MINE.—Capt. Henwood and Lanksbury, March 31: The 17, east of old shaft, is being rapidly driven towards the mountain, in ground which presents a kindly appearance, and is producing a little copper ore. The stopes in the 28 continues to produce about 2 tons of copper ore per fathom.

Owing to the above reports having been delayed in transmission the following mid-monthly report from Capt. Henwood and Lanksbury, dated April 16, has arrived at the same time:—OOKIEP: The 92, north-east of new shaft, still maintains its value—7 tons of high-quality copper ore per fathom. The south-east level at this depth continues to produce 8 tons of copper ore per fathom. The stopes in the back of the 92, north-east of No. 23 winze, yields about 1½ ton of copper ore per fathom. The present bottom of No. 35 winze, sinking below the 80 fm. level, is worth 6 tons of copper ore per fathom. The 80, east of new shaft, has improved; the present end is worth 6 tons of copper ore per fathom. The 80 east, towards new shaft, yields 4 tons of copper ore per fathom. The ground in the 68, south of new shaft, is composed of magnetic iron, quartz, and copper ore, but not sufficient to save. The 68, east of No. 32 winze, has fallen off a little in value; now worth 2½ tons of copper ore per fathom. The 34 winze, sinking below the 58, is still worth 5 tons of copper ore per fathom. There is no other point of operation to notice.—Spectakel: The ground in the 64, south of incline, has become a little easier for driving. The same level (north of winze) towards incline is still hard. The ground in the same level, east of winze, has changed considerably for the better, showing indications of copper ore. The stopes in the bottom of the 53 continues to produce 5 tons of copper ore per fathom. There is no change worthy of notice in the 17, east of old shaft, except that the ground has become a little harder; but it is still presenting traces of copper ore. The stopes in the back of the 28 yields about 1½ ton of copper ore per fathom.

Returns: For March—OOKIEP, 1160 tons of 27 per cent.; Spectakel, 87 tons of 40 per cent.—Bills of Lading Received: 680 tons per Glamraon, 585 tons per Terna, and 530 tons per Anne Beal.—Arrival at Swansea: The Ianthe.—Sale of Ore: 800 tons of 13s. per unit.

LINARES.—May 12: The lode in the 115, driving east of Warne's engine-shaft, is large and strong, and yielding good stones of ore. In the 135, driving west of Pell's engine-shaft, the lode has improved a little during the past fortnight, being valued at 1 ton per fathom. The lode in the 120, driving in the same direction, is compact and regular, consisting of carbonate of lime and lead ore, worth 1½ ton per fathom. The 105, driving west of Pell's engine-shaft, is opening up a good length of ore ground, valued at 1½ ton per fathom. In the 15, driving east of Pell's engine-shaft, the lode is improving, being worth 1 ton per fathom. The lode in the 120, driving east of Pell's engine-shaft, is small, consisting of quartz and lead ore, valued at ½ ton per fathom. In the 105, driving east of San Francisco shaft, the lode is falling off in value, being at present worth ½ ton per fathom. Good progress is being made in Warne's engine-shaft, sinking below the 115. In No. 232 winze, sinking below the 105, and worth ½ ton per fathom, the lode is small and the ground very hard. The lode in No. 235 winze, sinking below the 100, is improving; it produces 2 tons per fathom.—Quintinos Mine: The lode in the 105, driving east of Taylor's engine-shaft, is very regular, with occasional stones of ore. In the 30, driving east of Taylor's engine-shaft, the lode is improving in appearance, but does not contain ore enough to value. The lode in the 80, driving east of western boundary, is small and poor, and the ground hard. In the 55, driving east of western boundary, the lode is small, containing a little ore, but not sufficient to value. The lode in Judd's shaft, sinking below the 65, is favourable for sinking through, and yielding a little ore.

FORTUNA.—May 12: Canada Inco's: The lode in the 120, driving west of engine-shaft, contains stones of ore, but not enough to value. There is no improvement in the 50, driving west of Abercrombie's shaft. The lode in the 60, driving in the same direction, is rather small at present, being worth ½ ton of ore per fathom. In the 70, driving west of San Pedro's shaft, there is a strong and regular lode, worth ½ ton per fathom, but it is less productive than it was. The lode in the 80, driving west of San Pedro's shaft, is open, and of a very promising appearance, being valued at ½ ton per fathom. The 80, driving east of San Pedro's shaft, is opening fairly productive ore ground, worth 1 ton per fathom. The 70, driving east of San Pedro's shaft, continues to produce good stones of ore. The 120, driving east of O'Shea's engine-shaft, has very much improved, and is now a fine looking lode, producing 1½ ton per fathom. In the 100, driving east of Lowndes's shaft, a good length of profitable lode is being opened up, worth 1 ton per fathom. The lode in the 90, driving east of Caro's shaft, is small, disarranged, and unproductive. The men are getting on well with San Pedro's engine-shaft, sinking below the 80. Arista's winze is open and easy for sinking below the 30, and the lode is of a promising appearance, worth ½ ton per fathom. Rosale winze, sinking below the 70, consists of a strong and well defined lode, producing 1 ton per fathom.

Los Salidos Mine: The 175, driving west of Taylor's engine-shaft, and worth ½ ton per fathom, has fallen off in value in the past fortnight. The 160, driving in the same direction, and valued at ½ ton per fathom, has also changed unfavourably of late. The lode in the 175, driving east of Taylor's engine-shaft, contains good stones of ore, valued at ½ ton per fathom, but it is not so productive as it was. In the 160, driving east of Taylor's engine-shaft, there is a strong lode, consisting of white ore, calcareous spar, and lead ore, worth ½ ton per fathom. In the 145, driving east of Taylor's engine-shaft, is compact, with a little mineral. In the 130, driving east of Taylor's engine-shaft, the lode has further improved in the past fortnight, and is now worth 1½ ton per fathom. The 120, driving east of San Pablo's shaft, continues to open up a great length of splendid lode, producing 3 tons per fathom. There is no improvement in the 110 driving east of San Miguel's shaft. In the 80, driving west of Palgrave's engine-shaft, the lode is disarranged and unproductive. In the same level driving east of Palgrave's engine-shaft, the men are cross-cutting north to intersect Quintinos lode. Lowndes winze, sinking below the 120, and worth 2 tons per fathom, will be deep enough for the 130 in the present month. The weekly weighings of ore were kept up very regularly during the past month, and the stopes during that time did not undergo any change of importance. The ordinary surface work is going on steadily, and the machinery is in good condition. We estimate the raisings for May, five weeks, at 350 tons.—San Anton Mine: In the 30, driving east of Henty's engine-shaft, a great length of rich lode was driven through in the past month, sometimes worth 4 tons, but now valued at 2 tons. The 20, driving west of Henty's engine-shaft, has improved in the past week, and is now producing ½ ton per fathom. Henty's engine-shaft is being sunk rapidly below the 30 through a powerful and productive lode worth 2 tons per fathom. The water has very much increased, but the engine has plenty of spare power to cope with it.

ALAMILLOS.—May 12: The lode in the 115, driving west of Taylor's engine-shaft, is worth 1 ton of ore per fathom, and wide and easy for working, but it contains less lead. The 100, driving in the same direction, is producing good stones of lead, but not enough to value. The lode in the 85, driving west of San Adriano's shaft, is better defined, but it does not contain any lead. In the 60, driving east of San Victor shaft, the lode has fallen off in value, but it continues large and promising, producing ½ ton per fathom. The 70, driving west of Cristobal's winze, is worth ½ ton per fathom, and will soon communicate with the 70, west of San Victor shaft. The lode in the 70, driving east of San Victor shaft, is producing good stones of lead, valued at ½ ton per fathom. In the 70, driving west of San Victor's shaft, the lode if intersected, but does not contain lead at this point. In Taylor's engine-shaft, sinking below the 115, the men lead a few days while some necessary repairs were being made. Good progress is being made in San Jose shaft sinking below the 30. The lode in Canton's winze, sinking below the 50, is worth 3 tons per fathom, and has somewhat fallen off in value. Alberto's winze, sinking below the 100, is producing ½ ton per fathom, and will communicate with the 115 in a few days.

BUENA VENTURA.—May 12: The lode in the 40, driving east of Cox's engine-shaft, is small, containing a little ore, but nothing of actual value. The 25, driving west of No. 2 shaft, is temporarily suspended, and the men put to rise again No. 2 winze. In Cox's engine-shaft, sinking below the 30, there is a good lode worth 1 ton per fathom, in the western end of the shaft, but the eastern part is poor. No. 2 winze, sinking below the 10, will be communicated with 25 by the end of the month.

[For remainder of Foreign Mines see this day's Supplement.]

THE WEEK.

SATURDAY, May 15.—Trunk Seconds and Thirds opened quite 1 per cent. above the lowest of the previous evening, but sales being pressed again the improvement was quickly lost, the rise on the day being limited to about ½. Notwithstanding the promising state of the weather for the holidays, neither Brighton A nor Dover A could remain steady, each losing nearly ½ per cent. Richmond shares fell from 16½ to 16.

WEDNESDAY.—Markets closed.

TUESDAY.—After opening firm, and remaining steady for some little time, Trunks commenced running down, and closed at a considerable fall. The Third Preference receded 1½, to 38; the Seconds, after touching 71, fell to 62. Those who had previously bought home railways for the Whit Sunday traffic commencing, Brighton A, fell to 158, and Dover A, to 135. The fall in Berwick and York A, was of the same dimensions—1 per cent. Mining shares were a good deal offered. Richmond, 15½ to 16½; East Caradon, 12½; Panullicillo, 3½ to 4; Rio Tinto, 11½ to 12; Frontino, 3½ to 3¾; Exchequer, ¾ to ¾.

WEDNESDAY.—For the first hour all the markets were firm at higher prices, but when selling was attempted there was a rapid collapse. Brighton A, quickly receded from 158½ to 156½, and the same was also a difference of 21 between the highest and lowest of Dover A. Odd enough the cheapness seemed to deter those who were eager buyers at much higher prices in the morning. A heavy fall took place in Trunks, the Second and Third Preference suffering the most. These closed at 67½ and 37 respectively, being about 10½ per cent. below the highest reached a short time since. Atlantic First Mortgage were dealt in at 66½ and the Seconds at 30.

THURSDAY.—A good traffic return put up the price of Trunks before the opening, though a good deal of the rise was quickly lost by some of the dealers being offering to sell stock 1 per cent. below the current quotations. The Thirds, while being quoted 28½ to 39½, were loudly offered at 33, which had the effect of choking off intending buyers. Later in the day, however, an important recovery was established. Erics opened higher, and managed to maintain their position, as did Atlantic. Home railways passed through several different phases, buyers and sellers alternately getting the upper hand. On balance a moderate recovery was shown all round.

FRIDAY (Opening).—The markets show a considerable degree of buoyancy. Brighton A, are strong at 158, and Dover A, at 135, Great Eastern being 53, and North-Eastern 159½. The recovery shown yesterday in Trunks is maintained. The Firsts are 67½, Seconds 71½, and Thirds 40. Atlantic Firsts are quoted 67½ to 68½; Derwent 2½ to 2¾; East Caradon, 12½ to 13½; East Crebrol, 3½ to 3¾; Glenroy, 20s. to 25s.; Herodsfoot, 3½ to 4; Leadhills, 2½ to 3; Minera, 10½ to 11; Parys Corporation, 1½ to 1¾; Prince of Wales, ¾ to ¾.—Two o'clock.—Prices are mostly higher, and the markets continue very firm. Brighton A, have reached 159, and York A, 124. Caledonian, 108½ to 109½; Sheffield, 89½ to 89½; ditto, A, 56½ to 56½. Egyptian Unifed are 59, and the Darra 73½ to 73½. Trunk Seconds have further improved, and are now 72½. When Crebrol, 3½ to 4; Phenix, 4½ to 5; Tankerville, 4½ to 5; Val de Travers, 7½ to 8.—Four o'clock.—Brighton A, has been 109½, now scarcely so good. Egyptian Darra, has recovered to 74. Atlantic Firsts are in demand at 68. Great Western have reached 119, and Berwick 160. Richmond, 16 to 16½; Flagstaff, ¾ to 1; Almada, 9-16ths to 11-16ths; Colorado, 6 to 7; Newport Abercrom, 2 to 2½; Chapel House Colliery, 1½ to 1¾.

FERDINAND R. KIRK.

WEST DEVON GREAT CONSOLS.

TO THE

READERS of the "MINING JOURNAL."

We have repeatedly directed particular attention to this important property, and have not hesitated to describe it as the best cheap speculation since the famous discovery of 1844.

When Devon Consols was started in August, 1844, they had nothing to commence upon but a lode producing gozzan and spots of copper ore. In about three months, the lode improved in size and character, and all at once a course of copper ore was cut which gave profits of £72,000 in the first 14 months, and Shares then steadily advanced from £1 to £800 each.

The famous South lodes from Devon Consols run immediately into West Devon Consols—the river Tamar being the legal boundary between the two mines. Trial pits are now being sunk on them, and the very same character of gozzan (with spots of rich ore) has been cut in each pit. At any moment (as in Devon Great Consols) a course of ore may be cut, and, if so, Shares will go to a very high price. This point is being anxiously watched, and many members of the Stock Exchange and of the Mining Market, as well as numerous mining authorities, have personally visited the property, and in no single instance has an adverse opinion been expressed; in fact, the Shares have been steadily absorbed by those who have seen the property for themselves.

There are 5 lodes. A shaft has been sunk 80 fathoms on one lode, and recent examination shows that four of them dip towards the shaft, so that a cross-cut will intersect them and lay open an immense extent of ore ground. But, apart from this important point as already mentioned, a shallow and rich bunch is expected any moment, as was the case in Devon Consols in 1844.

Shares are now £3½ to £4, and we wish to state that as soon as solid ore appears the price will double. We have been correct in our views to the present, and although numbers have made profits, greater profits will yet be made.

JAS. SCOTT & CO.,
5, Copthall Buildings,
Bank,
London.

Mining Correspondence.

BRITISH MINES.

ABERLYN.—J. Roberts, May 20: In the Valley cross-cut we have driven about 3 fms. during the past month. There has been, as I have reported from time to time, some good stones of lead in the joints crossing the end, and now we have a branch or leader going in the same direction as the cross-cut, which contains good stones of lead. It is difficult to say how much further we have to drive to intersect the lode; but unless the direction is very much changed, there can be no great distance. It appears that we are now in the vicinity of it. The cross-cut at the No. 3 is without any change to notice during the whole of the month; I expect that we shall have to drive 3 fms. or 4 fms. more to intersect the lode. The stope at No. 2, on the Great Gorse lode, have been rather better for blende, but those on the soft lode have very much fallen off in value. You are quite aware that the blende on the soft lode is very bunchy, and may come in to a day's notice. I have put two men to continue this end further north in search of lead as well as blende. It is the general opinion, and I think on good foundation, that the piece of ground between this end and the lake will prove rich for lead. However, we shall not have to drive far before we come to another bunch of blende. I have been making a trial at the No. 1, on the soft lode, and we have a nice little lode for lead. Not far from this place the old men discovered a good bunch of lead, and I have been told that they sold a great quantity of lead from there. It is quite possible that this we now have may lead to a good bunch; it is true that we have only about 10 fms. of backs, but then we have great length should it continue. The weather is still very dry, and no chance of dressing.

BEDFORD UNITED.—R. Goldworthy, May 19: Saturday last being pay and setting day, the following bargains were let:—To drive the 138 east, by four men, at 112. per fathom; the lode at present is small and poor, but we expect an improvement here shortly. To drive the 127 east, by four men, at 124. per fm.; the lode is 2 ft. wide, and worth 102. per fathom. To drive the 115 east, by four men, at 134. per fathom; lode worth 104. per fathom. Two stopes in the back of the 138—No. 1, by four men, at 44.; and No. 2, by two men, at 44. 5s. Two stopes in the back of the 127, by six men, at 44. 5s., and one in the back of the 115, by two men, at 44. per fathom. These stopes are worth on an average 87. per fathom. Two tribute pitches—one in the back of the 115 and in the back of the 103, by four men, at 9s. in 17.

BELOWDA.—Thomas Parkyn, May 19: Since last week's report the lode has improved in the adit level, and there is more water coming from the lode. We are driving on the footwall side, carrying 6 ft. of the lode; we have not seen the hanging wall, and I cannot say how wide the lode is at the adit, but from appearances it is as wide as it is in the new shaft, which was 17 ft. wide at 9 fms. from the surface. New Shaft: We are now down close upon 12 fms., and the lode continues to yield good work for tin; in fact I have no alterations to report. We are making excellent progress in sinking the shaft, and have no water to contend with; this may be accounted for by reason of the adit being driven on the lode which is about 11 fms. below our present bottom of the shaft, and the lode being so large the adit has drained the shaft. I have dined the adit again, and I was right in my drafts sent you a fortnight since. The mine has been inspected this week by an eminent firm of mining engineers of London, and I am pleased to say they are highly satisfied with the prospects of the mine, and they approve of all that has been done as being to the purpose.

BLUE HILLS.—S. Bennett, R. Harris, May 15: The lode in the 24 east end is improving, and is now worth 87. per fathom, and in the west end it is worth 77. per fathom. In the 30 east end it is worth 87. per fathom, and in the winze below this level 252. per fathom. In the 20 east end the lode is 1 ft. wide, and producing low quality tinstuff.

BOLDRE.—M. Hotchkiss, May 20: Maes-y-Pwll lode: In the 60 east we are driving to cross the lode to the footwall, where I expect to find the lode much improved. The 17, driving east, will produce 1½ ton of rich lead ore per fathom, and the stope in back of the same level from 1½ to 2 tons per fathom, besides blende. The engine-shaft sinking below the 90, by 11 men, is progressing as fast as the nature of the rock will allow, and I believe when we come to intersect the lode in these measures we shall find it highly productive of lead ore. All surface operations going on regularly.

BWILCH UNITED.—N. Bray, May 15: The shaftmen continue to make good progress with their second shaft, and are sinking to another level (No. 110). The lode in the 100, driving east, has not been stripped down since last report, but occasional blasting proves that the ore still continues; and altogether this important point is very encouraging. Next week two additional hands will be put in this bargain. The lode in the 80, though large, is not altogether of so kindly an appearance as hitherto. The stuff from the rise just communicated with the 60 has been cleared, and we have commenced stoping from the end of same in a fine looking lode, worth fully 20 cwt. of silver-lead ore per fathom. The self-acting jigger, rods, and other materials have been brought to the mine, and the smith and carpenter are busy about their work; but in order to expedite the erections during the fine weather I have engaged another carpenter to commence next week.

CARON.—J. Kitto and Son, May 17: There has been no very important change in any part of the mine since the date of our last monthly report. The lode in the 22, driving east, certainly shows better prospects, but there is not sufficient ore in it to value, and we have about 10 fathoms further to drive to reach the next bunch of ore discovered in the 10, and upon which we commenced to sink a winze after last board meeting, but had to suspend the same in consequence of the heavy feed of water. The lode in the winze contained very good ore, and we expect a decided improvement in the 22 as soon as it reaches this point. The surface water has fallen off to that extent that we are unable to keep the shaft clear, and consequently the sinking below the 22 is for the present suspended, but will be resumed as soon as the water supply is sufficiently increased. The stope is yielding about their usual quantity of ore, and the machinery is in very good repair.

CLEMENT.—J. Roberts, W. Sandoe, May 19: The rise at the 34 and the sump at the 15 are quite equal to what we reported last week. We will send a detailed report next week.

COMBAMARTIN.—John Harris, John Comer, May 13: In the 17 north west the counter lode the lode is fully 5 ft. wide, producing occasionally nice patches of good lead from the hard part of the lode, which has a very kindly appearance; we have to-day set the level to drive, by four men, at 44. per fathom the month. The same level south-east we have also set to drive, by four men, at 44. 10s. per fathom the month; the lode is not looking so quartz as it was a few days ago, being a little disordered by a cross-cut, but which we hope will show a better appearance again in a day or two. The winze to sink below the adit level, by four men, at 57. 10s. per fathom the month; the lode continues principally of killas, but it is showing more quartz in the footwall—we are expecting the lode will be showing a better appearance shortly. The winze is now down 10 fms. 4 ft. 3 in., and we are hoping that in another two months we shall be deep enough for the 17. We also set the filling, drawing, and putting away the stuff from the 17 to the adit level, to two men and one boy, at 84. per month—the men to pay their own costs.

CROOK BURN.—Wm. Vipond, May 14: The pulpmeter pump is now at work, and the sinking going on. The men have put a sump hole down so as to clear the bottom of the shaft of water, and are now cutting into the side of the shaft to make a reservoir to receive the water from the lower pump. I expect to get a full complement of men next week to keep the sinking going on continuously night and day.

BWM PRYE.—Abraham Francis, May 20: We are sinking a winze under No. 2 adit in order to have a communication with the inclined rise over the mine way, and expect to hole this week; lode in the 15, per fathom. This effected it will give great facilities for breaking down large quantities of ore at a very cheap rate. The other bargains are without alteration since last reported on. The machinery is working splendidly, and dressing going on at the rate of 12 tons per week, or 50 tons per month, which leaves large profits. During the dry weather we have taken every precaution to secure our pipes crossing the River Rhedol against storms, floods, and frost in winter, and all surface arrangements are now complete.

CWLESTWITH.—May 19: In the 15, driving east of Pugh's cross-cut on the new lode by rock-drill, the lode is getting more settled, and now producing a little lead and blende; a good feed of water is also coming from the lode. In the 15, driving west of Pugh's cross-cut on the new lode, the lode is small, but producing a little lead and blende. In Gill's lower level driving east of No. 1 winze on the new lode, the lode is 2 ft. wide, but has fallen off in value for the last 5 ft. driven, now producing ½ ton of lead ore per fathom. In the 12, driving east of cross-cut on the new lode, the ground is very hard and tight, and progress is slow; the lode continues to yield good stones of lead and blende, but is not sufficient to value. In the winze to sink below Gill's lower level on the new lode the water has very much increased during the past month, and all the water has been cut down from the upper levels; the lode is 5 ft. wide, worth 1 ton of lead and 1½ ton of blende per fathom; the feed of water which has been tapped in the 15 coming under we hope will tend to relieve the water in this winze. No. 1 winze sinking below Gill's lower level, on the new lode, has already been sunk about 2 fms. below the level, and being now dry we shall resume the sinking of it for a new level; the lode in the bottom is 2 ft. wide, worth 1 ton of lead per fathom. In the rise over the 15, west of Pugh's cross-cut, on the new lode, the lode is 2 ft. wide, worth 1 ton of lead and blende per fathom; the rise is now 7½ fms. above the 15. In the pitch over level Fawr, east of level Fawr cross-cut, the lode is 12 ft. wide, worth 12 cwt. of lead ore per cubic fathom. The pitch under Kingside adit level, east of Kingside shaft on Kingside lode and branches, is producing 12 cwt. of lead ore per cubic fathom. In the pitch in back of Kingside adit level, on Kingside lode and branches, the lode is 4 ft. wide, worth 15 cwt. of lead ore per fathom. The pitch over Gill's upper level, west of Gill's cross-cut, on the Comet lode, is worked for blende, and will produce 2 tons per fathom. In the pitch over level Fawr, on Kingside lode and branches, the lode is 4 ft. wide, worth 12 cwt. of lead ore per fathom. Our dressing machinery is still at a standstill for want of water, therefore very little is doing on the dressing-floors; the long drought now over two months has not only dried up the ponds, but the river also, and we cannot get home water enough to work one mill.

D'ERESBY CONSOLS.—J. Roberts, Wm. Sandoe, May 19: On the Cobble's lode we have driven during the past month about 5 ft.; the lode is getting more open than we have seen it at all, and letting out more water than usual, and in every respect looking kindly than of late. The Red lode, the part we have been driving on, has not shown the signs of productiveness that we are lead to expect from the appearance at a shallower depth; we have, therefore, put the men to drive on another part which is looking much more promising, and producing good stones of blende. The Gorse heading has been more close and less spots of lead, but now it appears to be opening out wider again, and the walls becoming more defined. On the surface we have cleared up a portion of the old workings on Owens' lode, and find in the bottom a leader of lead about 5 fathoms in length; in some places it is pinched up to an inch wide, and in other places it is from 3 to 12 in. wide, but the wider parts do not contain so much pure lead in proportion. As it is not likely that the old men would leave the lode very rich in sight if they could have worked it with the water we think it advisable to sink a little deeper, believing it is only a temporary falling off in the value of the lode.

D'ERESBY MOUNTAIN.—J. Roberts, W. Sandoe, May 19: The Gorse shaft is down to the 15, and the men are engaged about the dividing and casing. We expect by this day week they will complete the whole. The sump and stopes at No. 5 are without change in value.

DERWENT.—J. Morpeth, May 20: The 95 on middle vein, east of Jeffries, for the width carried, yields 22 cwt. ore per fathom, and the workings in the back

yield 15, 18, and 15 cwt. of ore respectively per fathom. The stopes over the 93 west produce 8, 14, 12, and 14 cwt. of ore per fathom respectively. The Sun vein, in the 70, east of shaft, is worth 11 cwt. The stopes at the 83, east of Westgarth's, on middle vein, are worth, in the aggregate, 7 tons, being an average of 15 cwt. of ore per fathom. The cross-cut towards north vein at this level is still vigorously pushed, and will, I expect, measure to-morrow about 11 fms. for the month; the ground is a little stiffer than it was in April. The vein in the rise over the 74, as far as yet seen, is worth about 20 cwt. of ore per fathom; but we have not yet seen the north cheek. We are pushing drawing and dressing. The weather is fine, and dams are full to start summer on with.

DUBBY SYKE.—William Vipond, May 15: The mason is getting on with the building of the wheel pit as fast as we can get the stone down the fell for the purpose. The water race is also progressing, and will soon be finished. We must have the wheel also brought on from Nether Hearnth, so that there may be no delay when we are ready for getting it up.

EAST CRAVEN MOOR.—D. Williams, May 20: The new shaft from surface is sunk 10 fms. 4 ft. below the 54, and will be down the depth required for driving both ways upon the lode this week, when we shall put in the claters, cut pit, and proceed with sinking for another level without delay, driving the shaft direct to surface with the engine. The vein in the bottom fully maintains its size and value, and will yield from 2½ to 3 tons of lead ore per fathom. We shall have 40 tons of lead ore in course of smelting this week; in addition to this we have at the smelting mill ready for sale the produce in pig-lead of 62 tons of lead ore.

EAST DARREN.—May 19: In the 104 cross-cut south the ground is composed of beds of grit, branches of carbonate of lime spotted with mundle, and letting out a cream of water. In the 56, east of footwall cross-cut, the lode is 1 ft. wide, yielding 12 cwt. of lead ore per fathom. In the 56, west of same, the lode is 1½ yard wide, yielding 1 ton of lead ore per fathom. In the 50, east of Skinnid's shaft, the lode is 2 ft. wide, containing more spar, with occasional spots of lead ore. The tribute pitches throughout the mine are without change to notice since last reported on.

EAST DEVON CONSOLS.—J. Browning, May 19: I am happy to say that we are progressing most satisfactorily. The ground in the adit end is all that can be desired; we have never seen it looking so favourable for the production of mineral as it is at present. The lode is full 4 ft. wide, and thickly impregnated with ore. I should strongly recommend cross-cutting, so as to intersect another side lode, south of the present workings; when this is done I feel sure it will prove to be rich in depth.

EAST LONGSTONE.—W. Thompson, managing director, May 20: By a mistake of the clerks in the office and the agent of the mine not giving the pay day as last Saturday the men were not paid, and a report has been spread that the mine was "knocked." I must, however, tell the shareholders that there are ample funds in hand to prove the mine, and under any circumstances I would pay costs out of my own pocket to see the end for which the mine was started. I am going to-day by the 2-20 train to Launceston to discharge all the men, and obtain a better and more reasonable class to work. This is the first time the pay has been neglected, not put off, and much having been said respecting the pauperism of miners in the North of Cornwall, I can only infer that it is the men's fault they have to seek parish relief. Our case is not an isolated one. Capt. Phillips, the agent at the mine, writes, May 19, 1880:—Dear Sir,—The money for the pay at East Longstone Mine not being forthcoming on Saturday last, neither on Monday, yesterday, or to-day, the men, as you may have conjectured, have stopped working, and they will not resume work there until they have been paid the money that is due to them, and besides they are getting very clamorous because they have not been paid before this time. If any satisfactory explanation had been forwarded to show why the money had not been forthcoming at the proper time, and also a word of encouragement that it would come all right in a few days all would have gone on comfortably. To knock the mine at this time, as it appears to every person here that it is the case, is the most absurd and foolish thing of the kind that I ever knew. The adit end must be very near the lode, and perhaps by driving it 1 ft. further a rich lode might be laid open, and the 'cab' being very large, is very probable that the lode is very large also. It is a well-known fact among miners that the cab of a lode is always worthless, even if the lode that is contiguous to it is very rich.—Thos. Phillips.

The intelligence of the agent and men is very distinct, seeing that they are cutting through the wall of the lode, and yet without asking a question they strike work. It is much to be regretted that I removed the good steady old miner, Capt. Harris, to Fortescue Mine, although his services were most valuable to the body of shareholders. Capt. Harris would have telegraphed me about the pay, but Mr. Phillips waits until Wednesday before he gives me the least intimation that the pay was over due, and with his letter I am favoured with one from a firm of solicitors in Launceston. I shall, however, bring miners from the West if I pay them higher wages.

EAST ROMAN GRAVELS.—Arthur Waters, May 20: The engine-shaft is now 5 ft. below the 97, and the men are pushing on for another level. The lode in the 97 south is 3 ft. wide, composed of good looking portions of lime, and we expect an improvement for lead in the end shortly. The lode in the 85 south is 4 ft. wide, of the same value as when last reported on. The lode in the winze below the 75, near the shale, is worth nearly 3 tons per fathom. The four pitches in the back of this level are worth about 1 ton each per fathom. The pitch in bottom of the 50 south is worth ½ ton per fathom. The pitch in the 20 south is worth ½ ton per fathom. The pitch in the 6 fms. level north is worth ½ ton per fathom. Owing to the dry weather the water for surface purposes is very scarce. We send out samples to-night of 25 tons of lead ore and 20 tons of blende.

EAST YAN.—W. H. Williams, May 19: I have set two more men here this week, making the pair 6 men, so as to push the cross-cut north as rapidly as possible. As yet we have seen nothing of the lode in the cross-cut.

EAST WHEEL BULLER.—W. Tregay, May 19: The new horse-whim is very nearly completed, and in a few days will be ready for hauling; as soon as this is ready we shall commence cross-cutting further south towards the lode, which produces the tin on the back, and north, where within a very short distance stands in virgin ground a very important lode, which has been exceedingly productive of rich copper ore in all the neighbouring mines. The No. 1 lode on which we are driving east is 12 ft. wide, still a very fine gozzan, and promising for a good course of copper ore.

FORTESCUE (Stannagwyn).—J. James, H. B. Harris, May 19: We have broken down some rich tinstone on the footwall of the great lode in cutting down the engine-shaft for the pumping gear. The lode in the stope is over 30 ft. wide, quite as productive as when we last reported on it. As soon as we have fixed the whim on the engine-shaft we shall draw up a large quantity of rich stuff in the engine for the stamping-house in the mine, including loading, stands, &c., and we are erecting the stamping-engine with all speed, and also the stamps as well. In the course of a few days the masons will begin about the calciners.

FRONGOCH.—J. Kitto and Son, May 15: At the 154, east of Vaughan's shaft, we are cross-cutting north through the lode to fully prove its size and value at this point, and judging from present appearances we are probably getting near the north wall. As may be inferred from our previous reports, we have already driven through an extraordinary large, well-defined, and most promising lode, containing large patches of lead and blende ores, and if we find nothing more valuable in the present cross-cut we shall soon turn and drive east on the most promising part towards the run of lead ground being operated on at the 142. At the 142 we are driving east on the north part of the lode, which during the past month has yielded from 20 to 30 cwt. of lead ore per fathom, and the present forecast rather exceeds the latter valuation; the general character of the lode is very congenial for producing large quantities of ore; this end is several fathoms in advance of the 154 referred to above. At the 142, west of Vaughan's shaft, we are stripping down the lode on the north side of the level, but have not yet cut through it; as far as seen it yields 12 cwt. of lead ore per fathom. At the 130 west we are cutting out the lode on the south side, where it yields fully 15 cwt. of lead ore per fathom. At several other places throughout the mine we are laying open considerable sections of profitable lead and blende ground, and we are pleased to be able to state that the stopes and tribute pitches never yielded more ore nor looked better since we commenced operations than they do at present, but we are sorry to say the unusually long drought at this season of the year which we have been visited has during the past month much winding and dressing operations. We hope this interference to be only temporary, and that we shall soon be in position to actively resume the usual full course of operations both underground and at surface, and by getting a fair price for our minerals we are confident of making profitable returns for a long time to come, as we have large quantities of both lead and blende ready for the dressing-floors, and from the foregoing it may be seen our resources of productive ground look well for the future. We have sampled 100 tons of blende to-day, for sale on the 25th inst., and we have now lying broken underground and at surface fully 100 tons of blende and 150 tons of lead ore.

GATTON COPPER.—G. Rowe, G. Rowe, May 15: The lode in the 117, east of shaft, is improving in character, yielding 6 tons of arsenical mundle and ore per fathom. The lode in the 105 east is producing 4 tons of arsenical mundle mixed with ore per fathom. The lode in the stope in bottom of the 105, west of cross-cut, is worth 122. per fathom. No. 2 stope, in bottom of the same level, east of cross-cut, is worth 144. per fathom. The lode in the 95, west of cross-cut, is yielding 6 tons of arsenical mundle per fathom. The lode in the stope in back of the 95 is worth 152. per fathom. All other points are without change.

GREEN YAN.—R. Rowe, May 19: In the shaft sinking below the 108 the lode is wide and of a promising character. In the 103 north the lode does not present any change, that is the part we are driving on; next week we shall prove the part left standing, the lode altogether still being wide. In the south end the part of lode being driven on is now soft, and letting out much water; there is more lode standing on each side. We are obliged to add another balance-bob at the top of the shaft to assist the wheel and guard against a possible breakage; it will be understood that as we go deeper there will be increased strain upon the wheel and rods in the shaft, this can best be provided for and met by an additional bob.

GREEN HURTH.—W. Vipond, May 14: The Swan shaft continues sinking in the haze, and there is no particular change to report about it. The stope south, over the 30, is yielding about 15 cwt. of ore per fathom. No. 2 stope, north of Vipond's sump, is yielding 1½ ton of ore per fathom. The north stope is yielding 2 tons of ore per fathom, but it will be into poorer ground, both north and south, next week, as it is close up northward to where the end turned up recently five below; and south it is just coming to where the good ore was so unproductively cut off on the east side of the level. I shall put four of the men on Monday from the south stope to commence No. 3 stope, north from Vipond's sump, as this will be entirely in the haze on both cheeks. I think we may with confidence look for it being more productive than the two stopes we have below. We finished the delivery of the ninth wagon of ore yesterday, and we shall complete the present sale to-morrow.

—W. Vipond, May 15: The Swan shaft is still in haze, but indications in the bottom show that it is coming to the grey beds and plate. The haze has been mostly in thin heavy posts, very good for sinking. A small branch came into the shaft yesterday from the east side, yielding nice samples of ore. The shaft is down 1 fms. 2 ft.; sunk this week 1 fm. 5 ft. 4 in. We can hear them working very distinctly now in the shaft from the 30.

GRIFFIN.—Charles Kneebone, May 19: The stopes over the 15 are without any material change in value, each producing 1 ton of lead ore to the fathom, but the ground is still in a twitch, and very slow of progress. We have not been able to draw stuff from here for some days, as we require the bottom for storing the water. The No. 1 stope in the 10 is worth 12 cwt. of lead ore per fathom, and the lead appears to be going down on the west side and behind the 15, and probably behind our shaft also. The No. 2 stope, north of No. 2 shaft, will produce 10 cwt. of lead ore per fathom ground hard. We are preparing to draw the tributary ore (who are engaged on the Pen-y-Aile lode) down to the Cornilanch dressing-floors, and shall commence to dress it there forthwith.

The scarcity of water is our greatest drawback at present. We have sampled a parcel of lead ore for sale on the 25th inst., and have engaged the services of a good dresser.

GROGWINTON.—John Kitto and Son, May 17: The deep adit level driving east has undergone a change for the better since the date of our last report, and is now yielding good stones of ore, with every prospect of further improvement. The other levels in the same direction are still rather poor, but the intermediate level, No. 4, level, west of the cross-cut, is looking very much better, and will yield at present from 30 to 35 cwt. of lead ore to the fathom, whilst the stone in the roof of this level, and referred to specially in our last report, has further improved, and is now worth fully 2½ tons to the fathom. There is nothing particularly new in any of the other stops that calls for special remark; but, as a whole, they look as well as usual, and are yielding a full average quantity of ore. We have commenced with the new shaft for the purpose of developing the mine below the deep adit level, and shall push on with the same with all possible speed; we have about 150 fms. to sink and rise, but we hope to complete the same in about six months. We have sold since our last report to Messrs. Nevill, Druce, and Co. 100 tons of lead ore, at 10s. 7s. per ton, and shall sell a similar quantity for the current month.

GVERN-Y-MYNYDD.—A. Francis, May 20: Fawog; The Brammoch sump is now down 13 yards, and we think it expedient at this depth to commence our drivings to the main ore runs in bottom flat into the new and unworked ground east of north-east by south-west level, which is in hand. We are influenced in this decision by the open and mineralised character of the flat both in the eastern sump and in the downhill referred to in my last, which are on the west of the north-east by south-west level, and where we find evidence in every form of our proximity to a body of ore. I can assure you that the trials above mentioned are prosecuted with vigour; they are, however, necessarily tedious by reason of the water with which we have to contend which makes progress slow, but I have no misgivings as to the result being a success, and a great one; we are besides in a position now to solve the problem quickly. Our bottom level north-east in north-east by south-west level is now being driven with good speed. It has entered the upper flat measure, but not sufficiently advanced to meet the upper flat which will come into this level by reason of its dip in the direction we are driving. This level is not only an excellent trial for new and unworked flats on the north, but will enable us speedily and inexpensively to develop the upper flat that promised so well at the top of No. 1 rise to same. The driving from top of diagonal rise to shaft proceeds, and may any day strike into ore.—**Western Shaft:** The driving from this shaft is now communicated to the one referred to in my last still further west, and trials in the upper flat in this quarter will commence as soon as we have the shaft cleared and the necessary arrangement for driving completed. I have the greatest faith in this trial.—**Colliery:** We are now sinking the whim-shaft with good progress. It is already completed to a depth of 55 yards. The ground is all I could wish, and so far as we are able to form an opinion I think we shall be in the upper flat in another 10 yards. I cannot help reiterating my convictions so often expressed—that here we have a grand future before us.—**Gvern-y-Mynydd:** Treasure Shaft: We are still opening the old adit towards Cat Hole, which will not only be useful in the development of this mine, but will enable us to dam much of the water we are now getting at Treasur Shaft. We are now in 20 yards from the shaft. The shaft in question is now sufficiently deep to commence a driving towards the deep adit, which will be commenced on Monday next, and thus shorten the time of its communication with the shaft. The greatest portion of the engine recently purchased is now on the mine, and matters are progressing towards the building and erection of same.

HERODSFOT.—P. Tenby, May 20: During the past week our shaftmen and the bottom end men have been engaged securing ground over the bafarob plot in the 50, which suddenly came away on Thursday last, carrying before it the bob, &c., which separated the main rods at the connection. We have managed to work the engine slowly, and keep the water as low as the 205 ft. level. 75-yds we have put the bob in its place, and hope to connect it to-morrow. I am pleased to report a further improvement in the 160 north; the lode is now 4 ft. wide, and worth 22 cwt. of ore per fathom. From the appearance of the lode I should say we are just entering a great course of ore. In the 190 north we have just met with another flocking crossing the end, which has also improved the lode for lead. The lode is now 15 cwt. of very fine lead per fathom. Nothing has been done in the 215 or in the 190 cross-cut this week. All the stops and pitches are of just the same value as reported on at our last setting. We are busy taking out the engine at Camborne Vein, and hope to have it on the mine next week. The water at surface has very much fallen off for drawing, &c. Our sampling will take place in a few days, and I hope to sample a little over 100 tons.

LADY BERTHA UNITED.—Thomas Neill, May 19: In the cross-cut adit south we have got into the capels of the lode, which makes it slow for progress; we have to-day set 2 fms. more to drive or cut the lode, to four men, at 7s. 7d. per fm. With no other change to notice.

LADYWELL.—A. Waters, May 20: In the adit level, south of new shaft, the lode is 3 ft. wide, but there is a leader on the footwall side, 1 ft. wide, composed of rich looking gossan and solid lumps of galena, of a very promising kind indeed. There is more lead in the lode to-day than we have seen for a long time past, and if we do not get into bunches of ore in soft ground soon I shall be greatly disappointed.

LEAD ERA.—J. A. Ede, May 20: The men have been this week securing their respective shares, and very little progress has been made in the driving. I propose next week driving the furrow near the open mentioned in my report of the 5th inst.

LOMAX (Old Wheel Rose).—W. Argall, May 19: Fair progress is being made in driving in Thompson's lode. The lode contains more quartz, with traces of silver and lead.

MARK VALLEY.—William George, James Stenlake, May 19: Salisbury shaftmen have been employed during the past week fixing pitwork, putting in water-pipes, &c., which has caused some delay in sinking; this, however, has been remedied, and we hope again to get on satisfactorily. There is no alteration to notice in the 148 east. We continue to make good progress in driving the 90 west, where the lode is very promising, and yielding good-quality copper ore. The lode in the end (east from rise) in back of the 40 is 2 ft. wide, worth fully 2 tons of ore per fathom. In the 20 west the lode is increasing in size, and improving in appearance; at present worth ½ ton of ore per fathom.

MELLANEAR.—J. Gilbert, May 19: We have cut the south-east part of the lode in the 40 cross cut, west of Gundry's shaft; it is 2 ft. wide, and yielding stones of copper ore, but not enough to value. The men will now drive east on the course of the lode, and we are expecting an improvement very soon. The lode in the 50, west of Gundry's shaft, driving east of the cross-cut on the south-east part, is 4 ft. wide, and yielding 3 tons of ore per fathom. The lode in the 60, west of the shaft, driving east on the south-east part, is 4 ft. wide, and yielding 3½ tons of ore per fathom. The lode in 60, west of shaft, on the main part, is 2 ft. wide, producing good stones of copper and blende. The lode in the 70, west of shaft, on the south-east part, is 5 ft. wide, and yielding 3 tons of ore per fathom. The lode in the 80, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 90, west of shaft, is 5 ft. wide, and yielding 2 tons of ore per fathom, and looking promising to further improve. The lode in the 110, west of shaft, is 4 ft. wide, and still yielding 1 ton of ore per fathom. The lode in the old engine-shaft, sinking below the 100, is 3 ft. wide, and yielding stones of copper ore. There is no change in any other part of the mine. Our sampling yesterday was computed 508 tons of copper ore.

MINERAL CORPORATION OF GREAT BRITAIN.—Wm. Bennetts, May 19: LARSA AND HON HENRY: The lode in the 105, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 110, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 120, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 130, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 140, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 150, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 160, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 170, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 180, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 190, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 200, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 210, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 220, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 230, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 240, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 250, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 260, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 270, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 280, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 290, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 300, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 310, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 320, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 330, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 340, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 350, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 360, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 370, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 380, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 390, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 400, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 410, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 420, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 430, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 440, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 450, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 460, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 470, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 480, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 490, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 500, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 510, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 520, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 530, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 540, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 550, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 560, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 570, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 580, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 590, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 600, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 610, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 620, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 630, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 640, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 650, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 660, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 670, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 680, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 690, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 700, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 710, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 720, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 730, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 740, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 750, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 760, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 770, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 780, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 790, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 800, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 810, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 820, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 830, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 840, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 850, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 860, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 870, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 880, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 890, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 900, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 910, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 920, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 930, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 940, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 950, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 960, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 970, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 980, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 990, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1000, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1010, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1020, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1030, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1040, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1050, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1060, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1070, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1080, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1090, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1100, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1110, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1120, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1130, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1140, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1150, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1160, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1170, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1180, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1190, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1200, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1210, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1220, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1230, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1240, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1250, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1260, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1270, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1280, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1290, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. 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The lode in the 1630, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1640, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1650, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1660, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1670, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1680, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1690, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1700, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1710, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1720, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1730, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1740, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1750, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1760, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1770, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1780, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1790, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1800, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1810, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1820, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1830, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1840, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1850, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1860, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1870, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1880, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1890, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1900, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1910, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1920, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1930, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1940, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1950, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1960, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1970, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1980, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 1990, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2000, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2010, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2020, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2030, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2040, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2050, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2060, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2070, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2080, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2090, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2100, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2110, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2120, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2130, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2140, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2150, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2160, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2170, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2180, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2190, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2200, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2210, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2220, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2230, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2240, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2250, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2260, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2270, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. The lode in the 2280, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom. 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The lode in the 3060, west of shaft, is 3 ft. wide, and yielding 1 ton of ore per fathom.

of ore and gossan from the back of the lode has been made. The ore shows a produce of 23 per cent. for lead and 25½ per cent. of silver to the ton, while the gossan gives a produce of 23 per cent. for lead and 14 ozs. of silver to the ton. The mine is close to the celebrated Herodsfoot Mine, which has given, and will doubtless soon resume, large dividends to the shareholders. We invite applications from investors who require further particulars.

75, Old Broad-street, London, May 21.

ALFRED E. COOKE.

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The Mining Market: Prices of Metals, Ores, &c.

METAL MARKET—LONDON, MAY 21, 1880.

IRON.	£ s. d.	£ s. d.
Fig. GMR, f.o.b. Clyde.	2 6	—
Scotch, all No. 1.	2 8	—
Bars, Welsh, f.o.b. Wales.	5 7 6	—
in London.	5 12 6	5 15 0
Stafford.	7 10 0	8 5 0
in Tyne or Tees.	5 5 0	5 10 0
Swedish, London.	9 0	10 0
Rails, Welsh, at works.	5 15 0	6 0 0
Sheets, Staff.	9 10 0	10 0 0
Plates, ship, in London.	8 0	—
Hoops, Staff.	7 15 0	8 5 0
Nail rods, Staff., in Lon.	7 10 0	8 5 0
STEEL.		
English, spring.	13 10	13 0 0
cast.	10 0	10 0 0
Swedish, keg.	15 0	—
ag. ham.	15 0	—
LEAD.		
English, pig, common.	10 0	15 5 0
“ “ L.B.	15 10	—
“ “ W.B.	18 0	—
sheet and bar.	15 15	16 0 0
pipe.	16 5	16 10 0
red.	18 10	—
white.	23 0	25 0 0
patent shot.	12 0	—
Spanish.	14 10	14 12 6
NICKEL.		
Metal, per cwt.	15 0	16 0 0
Ore, 10 per cent. per ton.	20 0	25 0 0
QUICKSILVER.		
Flasks, 75lbs. war. (nom.)	6 12 6	6 15 0
SILVER.		
Silesian.	19 0	19 5 0
English, Swansea.	19 10	—
sheet zinc.	24 0	24 10 0

* At the works, 1s. to 1s. 6d. per box less for ordinary; 10s. per ton less for Canada; 15s. per box more than 10 quoted above, and add 6s. for each X. Terne-plates 2s. per box below tin-plates of similar brands.

REMARKS.—Since our last issue, the metal market has not undergone any material change, the same dullness and quietude which we have lately had to report continuing to pervade most branches of the trade, and so far the general favourable aspect of monetary and political affairs seems not to have assisted the markets in the least; for the demand, if not at the lowest ebb, is nowhere near so satisfactory as could have been expected after the animated state of the markets at the early part of the year. Both shipping and consumptive orders are limited, and notwithstanding the facilities of finance at the present time, speculators and investors appear loath to enter into fresh engagements of any magnitude. Prices are so exceptionally low that it is little less than a marvel that not more buyers are induced to make purchases; but as this probably arises through no one appearing eager to commence buying in any large quantities, there may be yet a general mania for purchasing after a few of the leading operators have once set the ball in motion. At the commencement of the week a check was put upon business by the Whitsuntide holidays, but now sufficient time has passed for trade to have settled down to its ordinary condition, and business ought certainly to be looking a little brighter, as the comparatively recent light shipments to all countries, except America, must be a tolerably sure sign that their present requirements are barely satisfied, and that fresh orders will have, sooner or later, to be given out to make up for the deficiency. This fact ought to create a feeling of hopefulness, and buyers, whether for shipment or consumption, speculation or investment, should now be on the qui vive, and the careful not to let their opportunity slip away. It is very evident that at present prices there can be but little lost in effecting purchases, although the market fluctuations may cause prices to recede to some further extent, yet the chances are undoubtedly in the other direction. Our markets, at times, make sudden changes, and although at the moment all appear dull and quiet, still they may, in a very short time, become animated. Such was the way in which the revival first showed itself last autumn, and so sudden was the change, that but few would believe in the strength and durability of the rise, and it was not until after prices had been considerably advanced that buyers began to think they had misjudged their markets, came forward from all parts, and purchased freely, not merely for bona fide purposes, but also for speculation; and it is not unlikely but again at any time our markets may make a similar turn, and prices be enhanced far above their present level.

COPPER.—A somewhat better feeling prevailed at the opening of this market last Tuesday, owing to the fortnightly charters of Chili copper being then announced as only 300 tons, and a fair amount of business was reported in Chili bars from 57½ to 56½ 10s., the market closing at the lower figure. On Wednesday, however, buyers appeared shy to pay the increased rates, and as many sellers evidently endeavoured to avail themselves of the improved quotations upon the previous few days, the market quickly displayed a downward tendency, and purchasers were again enabled to buy as low as 55½ 10s. to 55½ 10s. Yesterday more tone was given to the market, but no improvement took place in prices, while to-day a still healthier tone has been perceptible, and the market closes at 55½ 10s. to 56½ 10s. The bi-monthly returns show the stock in first and second hands in Liverpool and Swansea, on the 14th inst. to be 32,525 tons against 33,036 tons of the present month, a reduction of 511 tons. The deliveries for the first fortnight of the present month were not so good as has recently been the case; nevertheless, they compare favourably with those for the corresponding period of last year, being 1086 tons against 838 tons. According to the Board of Trade the imports of Chili copper for the first four months of the present year were 34,910 tons against 31,079 tons for the same period in 1879; whereas the exports were 20,106 tons against 19,822 tons. These statistics cannot be reckoned altogether satisfactory, as the comparison is made with a period last year when the depression was very keenly felt; nevertheless, they show the visible stock of Chili produce to have slightly diminished, which is very useful at a time like the present, when the total stock is so exceptionally large. There seems now some probability of an early termination of the Chilean war. Hitherto the rate of exchange has been favourable for chartering, but the cessation of hostilities might cause a sudden change in the rate, and put a considerable check upon supplies.

IRON.—During the week the demand for all descriptions has kept limited, and prices have for the most part been fairly up-hill, no makers appearing disposed to make more than trifling concessions, and in such instances only for orders worthy of their consideration.

Nevertheless, in spite of the quietude which has of late been so marked, the prospects of the trade must be viewed as encouraging. Perhaps a short time will have to elapse before business is resumed again to its full extent, but the last few months' experience show that a considerable amount of sound business has been transacted, and although the aggregate of orders does not amount at the present time to any great magnitude, yet this probably arises through the dropping prices deterring many buyers from making more purchases than will meet their immediate wants, in the hope of still lower prices being shortly accepted. There appears to be strong evidence of the Indian trade reviving, for what with the combined influence of plentiful crops, and recent light shipments to that country, together with an improving exchange, an increasing business may be reasonably expected, and the longer business is curtailed now, the more probable does it become that as soon as the turn of the market takes place, there will be an augmented demand, for undoubtedly the consumption of iron is annually increasing, and, therefore, the longer buyers hold their orders in abeyance now, the more contracts must be effected hereafter, and probably as soon as the principal buyers think the minimum of the market to have been touched, there will be a general placing of orders from all sources, which would undoubtedly be the means of again speedily advancing prices. The American demand continues quiet, but the enhanced prices, together with the liberal supplies, were the original causes of the commencement of the inactive demand from that country; but now that prices have been so greatly reduced, it is not unreasonable to look for a revival soon taking place in the demand. The advices from Australia show that the trade there has become quieter and prices somewhat lower, owing to sellers pressing sales. It is stated that lately there has been a good amount of legitimate business in Scotch pigs, and No. 1 Clyde is quoted at 4½ 10s. per ton. The demand for galvanized iron is quiet, and best brands are selling at 28½ 2s. 6d., usual gauge. Fencing wire is in good request, and 15½ 5s. is asked for No. 5 gauge.

The Glasgow warrant market has remained quiet throughout the week at about 46s., closing to-day at 45s. 6d. The foreign and coastwise shipments last week compare favourably with those for the corresponding period of 1879, being 13,123 tons, against 9919 tons, and the total from Christmas were 302,020 tons this year, against 196,425 tons last. There was one more furnace damped down last week, thereby bringing the total in blast to 114. It would be well if makers would blow out a few more of their furnaces, as such an action could not fail to produce better prices, as one of the chief impediments to the progress of the market at the present time is the heavy stock; and if buyers saw that producers did not intend to allow the production to be increased, many would doubtless very quickly arrange purchases, and stocks would speedily decline. The public stock in Glasgow on the 15th inst. was 411,873 tons, against 439,651 tons on the previous week, or an increase of 2,772 tons. The country markets have been very much affected this week by the holidays, in some places the mills having been closed the whole of the week. Very little business is reported to have been transacted in the Midlands, but prices have consequently tended towards lower rates, although at times sellers have been slightly stiffer in their rates. Business is reported in No. 3 at 36s. 9d. nett. The public stock has not materially changed, the quantity held in public store on the 18th inst. being 52,710 tons. Shipments last week showed a falling off of about 3000 tons on the previous week. The exports to the continent, however, were rather better, the diminution being chiefly caused by the reduced quantities sent to America. Two furnaces are reported to have been blown out in this district, but as two more have been re-lit, no decrease will be made in the production. Although stocks have been considerably reduced during the past few months, they are still very heavy, and it would undoubtedly be in makers' own interest, if they were to allow them to be still further reduced, by diminishing the production. The manufactured trade keeps dull, but few inquiries are being received for any descriptions. Ship plate producers appear to be better off for work than manufacturers of other kinds, and are asking 6½ 15s., bars and angles being now quoted at 6½ 10s., though somewhat below these figures would doubtless be accepted. The Sheffield makers report having many orders on hand, especially for plate, and railway material. Prices, however, continue to drop, and hammers can be purchased at 75s., while rails are fetching 8½ 10s. per ton. Producers of sheets at Wolverhampton state that they are very busy in the execution of orders, but others are doing very little this week. There is also a fair inquiry for engineers' iron, but only at very low rates. Galvanized corrugated iron is quoted at 17½ for 24 wire gauge. The Birmingham market is reported without much change, either as regards price or demand. Business has been restricted in this district, as in others, by the holidays, some establishments remaining closed the whole week, while others have been working on short time.

There is scarcely any change to be reported from the Welsh districts, although, at times, there has been more tone given to the markets. Large clearances were effected last week, chiefly to the United States. The demand for rails is quiet, but bars are in tolerably good request; that for pigs, however, has lately somewhat diminished. The clearances last month from Cardiff were 24,706 against 10,001 tons for the corresponding period of last year; from Newport 23,441 against 3174 tons, and from Swansea 2355 tons; while last year the April clearances from this port were 24,706 tons. The figures are extremely satisfactory, as they show a vast increase in the actual amount of bona fide business which is being transacted at the present time.

TIN.—This market has remained in a very unsatisfactory condition throughout the whole week, and prices have continued almost daily to decline. On Tuesday, 75½ 10s. was officially quoted for Australian and Straits, or a reduction of 5s. to 10s. upon the closing quotations of last Friday. On Wednesday, from 74½ 10s. to 74½ 10s. was all that could be realized, while yesterday business was reported from the 74½ 10s. to 72½ 10s., but to day a slightly better tone has prevailed, and 73½ 10s. is the closing quotation. There seems no particular cause for this fall in value, as what with the improved statistics, and the recent slightly increased demand for tin plate, prices might be expected to rise rather than otherwise. But the movements of the market lately for all metals have been so very irregular, that the reduction in prices is perhaps more in sympathy with the general decline than from any actual falling off in the demand, or from any additional supply.

LEAD.—There is still but a very limited business being transacted in this metal, but no material alteration has taken place in prices; nevertheless, at times sellers display symptoms of weakness, but buyers appear indisposed to avail themselves of the reduced rates.

SPELTER.—This metal is dull of sale for both consumption and shipment, prices being weak and unimproved.

TIN-PLATES.—A slightly better inquiry exists for America, but prices show little alteration, owing probably to the reduced price of tin.

QUICKSILVER.—The importers have maintained their price at 6½ 15s., and business has been done from second hands at 6½ 12s. 6d.

MESSRS. HARRINGTON, HORAN, AND CO. (LIVERPOOL).—Chili copper charters for the second half of April were 3600 tons fine, consisting of 1600 tons bars and 2000 tons regulus for England and 1800 tons bars for the Continent. During the past fortnight we have had to submit to a reduction of 5s. per ton in the value of Chili bars, and very large sales indeed are reported as low as 55½ 10s. per ton; nevertheless the present available copper is equal to the demand, and large transactions took place on May 14 at the lowest price touched. As we write, however, holders are asking 10s. per ton advance. In furnace material the sales comprise 400 tons New Quebrada ore at 13s.; 120 tons Peruvian ore at 11s. 9d.; 150 tons English precipitate at 12s. 6d. to 11s. 9d.; and 500 tons Spanish precipitate at 12s. per unit. At the Swansea sale by tender, on May 11, 1039 tons ore, average produce 13½ per cent., realised 11s. 8½d. per unit. Import of Chili copper during the past fortnight 375 tons fine, against 348 tons fine same time last year; delivery ditto, 1086 tons fine, against 838 tons fine same time last year. Arrivals here during the fortnight of West Coast, S.A., produce: Galicia, from Valparaiso, 20 tons regulus, 275 tons bars, 300 tons ingots. At Swansea—Viz. Stocks of copper (Chilian and Bolivian) in first and second hands, likely to be available, we estimate at—

	Ores.	Regulus.	Bars.	Ingots.	Barilla.
Liverpool	—	—	—	24,790	50
Swansea	730	710	713	1,133	—
Total	730	710	713	31,923	136

Representing about 32,525 tons fine copper, against 33,036 tons April 30; 28,550 tons May 15, 1879; 19,609 tons May 15, 1878; 15,252 tons May 15, 1877. Stock of copper contained in other foreign ore and Spanish precipitate, 3079 tons fine. Stock of Chili copper in Havre, 3287 tons fine, against 4289 tons May 15, 1879. Stock of Coro Coro barilla in Havre 60 tons fine, against 475 tons May 15, 1879. Stock of Chili copper afloat and chartered for to date, 17,600 tons fine, against 15,400 tons May 15, 1879. Stock of foreign copper in London, chiefly Australian, 5700 tons fine, against 7922 tons May 15, 1879.

According to the Board of Trade Returns the total imports and exports into and from this country for the first four months of the following years were—

	1878.	1879.	1880.
Imports	1878.	1879.	1880.
Copper in ores	3,138	3,077	3,396
Copper regulus and precipitate	5,745	8,635	9,955
Bars, cakes, and ingots	13,833	16,544	14,861
In pyrites (estimated)	5,081	4,823	6,098
Total	27,797	33,079	34,910
Exports			
English copper, wrought and unwrought	10,800	9,874	9,604
Foreign copper, unwrought	4,435	4,460	5,434
Yellow metal	5,348	5,488	5,068
Total	20,583	19,822	20,106

MESSRS. PIXLEY AND ABELL.—GOLD: There has not been much doing in gold during the week, the arrivals having been comparatively small, but orders for export have been received which have absorbed all that has come to hand, together with 7000l. withdrawn from the Bank. The Dee has brought 12,800l. from the West Indies; the Guadiana 9160l. from the Brazil; the Cathay 67,160l. from China; the Australia 29,200l. The Ravens has taken 9100l. to Bombay, and the Nile 10,940l. to the West Indies. The Ravens has been the ruling quotation. The supplies have not been large; they comprise only 8230l. from India and 7000l. from New York. The Ravens has taken 71,000l. to Bombay; the Teheran, from Venice, on 14th inst. 82,000l., also to Bombay. The Gange, from Marseilles, took 21,800l. to Shanghai.

MESSRS. FRY, JAMES, AND CO.—COPPER has again declined in value, by from 30s. to 40s. a ton. The demand has been good, but the supply has been more than equal, and hence the receding values.—IRON has ruled steady, between 55s. 9d. and 58s. 3d. per ton for Scotch pig, but other descriptions have not been quite so well maintained.—TIN continues to decline, every day or two marking lower rates, and the total fall in price since our last is 5s. per ton. SPELTER is inactive, and about 10s. a ton lower in price.—LEAD has further declined, nearly 20s. a ton, and the demand is still but small.—TIN-PLATES have been bought more freely, and have recovered somewhat in value from the worst.

At Truro Ticking, on Wednesday, 2202 tons of ore of 7 average produce, and containing 155 tons 6 cwt. of fine copper, were sold for 8151½ 9s., being 3½ 14s. per ton of ore; 10s. 6½d. per unit, or

52½ 10s. per ton of fine copper in the ore, and an average standard of 917.9s. Subjoined are the particulars of the two last sales:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
May 6.	1214	93 10 0	7½	43 19 0	11s. 6d.	45 7
" 19.	2202	91 9 0	7½	3 14 0	10 6½	52 0

Compared with the last sale the decline has been in the standard 3½ 10s., and in the price per ton of ore about 4s. 10d.

The MINING SHARE MARKET has been very dull and depressed this week, with scarcely any business doing in tin, copper, or lead shares; the quotations given, therefore, are mostly nominal. Perhaps at no former period have shares been more influenced by the fluctuations in the metal market than they are at present, and we can only expect a reaction when metals improve; and metals, as we have before observed, are in the hands of speculators in London. But it is not alone in metals and mining shares that "speculating for a fall" is the order of the day. The writer on Trade and Finance in the Pall Mall Gazette of last evening justly remarks—"The chief speculators on the Stock Exchange seem just now bent on causing a general fall in prices; how or why matters little provided it comes off." We then caution "bona fide investors against being frightened should they see a sudden fall, as the stocks or shares are neither better nor worse for what the speculators may be doing."

TIN.—The standard for ore has dropped 2½ per ton, beyond the 5½ we announced last week, and tin shares have been very flat at lower quotations, with scarcely any business doing in them. Dolcoaths are 53 to 55. Carn Brea, 72½ to 77½; at the meeting held in Cornwall the accounts showed a profit on four months' working of 2454½, and the debt on the mine, which was 10,117½, at the last meeting, has been reduced to 7663½. The various points in operation at the mine are valued in the aggregate at 454½ per fathom. At the Wheal Owles meeting the accounts showed a balance against the adventurers of 17,362½. The tin sold (64 tons) realised 8861½. At the Botallack meeting, on Wednesday, the accounts showed a loss on the quarter of 92½, and a debit balance of 1819½. The whole of the stocked tin has now been sold, and the fall in price since the previous meeting is nearly 8½ per ton. Cook's Kitchen, 8 to 9; East Pool, 31 to 32; Polrose, 1½ to 2.

South Condurrow, 10½ to 11½; South Frances, 16 to 17; Tincroft, 17 to 18; West Basset, 17 to 18; West Frances, 16 to 17; West Peavor, 6½ to 7; Wheal Agar, 6½ to 6½; Wheal Basset, 3 to 3½; Wheal Grenville, 9 to 9½; Wheal Kitty (St. Agnes), 4½ to 5; Wheal Peavor, 26 to 27; East Lovell, 2½ to 2½; Wheal Sisters, 3 to 3½; Wheal Uny, 4½ to 5; Blue Hills, 3½ to 4½; Wheal Jane, 4 to 4½; Wheal Jewell, 3 to 1.

COPPER.—The standard for ore further declined at the Ticking in Cornwall on Thursday 3½ 10s. per ton. The average price of the ore sold was 3½ 14s. per ton for 7 produce, as against 3½ 19s. for 7½ produce on May 6, and 3½ 17s. 6d. for 6½ produce on April 22.

Devon Great Consols, 12½ to 13½; the sale of ore on Thursday (768 tons) realised 2041½ 12s. 6d. The accounts to be presented to the meeting show sales of copper ore for the six months, 5294 tons—14,308½ 17s. 5d. The amount received for arsenic during the same period is 15,517½ 5s., and the house at Abbotfield has been sold for 3000½. In February last a dividend of 8s. per share, or 4000½, was declared, and there remains a balance in hand of 11,271½ 17s. 6d., out of which a dividend will be declared at the meeting.

Wheal Crebors have been weaker, and leave off 3½ to 4. South Caradon, 120 to 130; the sale of ore, 480 tons, realised 2414½ 17s. 6d. Gunnislake (Clitters), 4½ to 4½; the ore, 324 tons, sold for 1896½ 1s. 6d. Marke Valley, 35s. to 40s.; the sale here, 205 tons, realised 564½ 11s. East Caradon, 14 to 2; Hingston Down, 17s. 6d. to 22s. 6d.; Melanear, 5 to 4½; Morfa Du, 20s. to 25s.; West Caradon, 3 to 3½; Parys Corporation, 24s. to 26s.; Prince of Wales, 12s. 6d. to 15s.; Mona, 13 to 15; West Seton, 20 to 25; West Tolgus, 55 to 60; East Crebors, 17s. 6d. to 20s. Devon Great United, shares in which are first offered to holders in Devon Great Consols, are quoted 10s. to 12s. 6d. prem. The mines, formerly West Maria and Fortescue and Wheal Williams, will now be under Devon Consols management. Carnarvon Copper, 1 to 1½; the statutory meeting was held on Friday, and very satisfactory reports read. Full particulars will be found in another column. The company have 5000½ in hand, and 3000 shares in reserve, and hope shortly to have the 90 fm. level under the rich course of ore at Garnon's, which down to the 80 and in a winze below it returned large quantities of ore.

LEAD shows no improvement. Lead shares all round are depressed, and quotations merely nominal, for in few instances could they be realised. This, however, is no reason why holders should sacrifice shares by forcing them on the market in the present crisis. In a few months all may be alive again. Van shares are quoted 18 to 19; the mine is improving in the bottom levels, while the cross-cut towards the north lode is presenting a most favourable appearance. The sale of ore next week will be 200 tons of lead ore and 150 tons of blende. Roman Gravel, 10 to 10½; the sale of lead ore this week (200 tons) realised 1975½. Tankerville, 4 to 5; Great Laxey, 18 to 19; East Van, 3 to 3½; Herodsfoot, 3½ to 3½; Leadhills, 2½ to 3½. Derwent, 24 to 3. The new lode in the rise above the 74 is worth 1 ton per fathom as far as cut through, but the whole width is not yet seen. The aggregate value of the stopes in the 93, east of Westgarth's, is 7 tons per fathom. South Darren, 3½ to 3½. The lode in the shaft is still worth 30½ per fathom; the 110 east, 10½; the 100 west, 7½. Stopes continue good, and there are four pitches let to 13 men at 7½ 10s. to 9½ per ton for lead, and 35s. for copper. The sampling this week is 55 tons of silver-lead ore. East Roman Gravel, 3 to 3½. The 86 is worth 2 tons per fathom, and the winze below the 75 nearly 3 tons per fathom. Sampling for the month 25 tons of lead ore and 20 tons of blende. Pandora, 17s. 6d. to 22s. 6d. The shaft is down 7½ fms. below the 33, and the lode is looking better than ever it has done before in the shaft. The 33 south, a new lode, has improved, and the winze below the 23 is turning out better.

Caron, 1½ to 2; Crosswood, 1 to 1½; Frongoch, 4 to 5; Grogwinion, 2 to 3; Hartington, 1 to 1½; Mawston, 1 to 1½; Red Rock, 1½ to 2; West Wye Valley, 1 to 2; New Wye Valley, 1½ to 1½; Ystwith, 1½ to 1½. Gwern-y-Mynydd, 5 to 5½; the weekly report is encouraging to both sections of Fawng and Deborah. Glenroy, 20s. to 22s. 6d.; the lode in the shaft below the 108 continues of a promising character, in the 108 south the lode is letting out much water. West Chiverton, 3 to 1½; West Holway, 27s. 6d. to 32s. 6d.; Minera, 10½ to 11½; Pennant, 3 to 3½; Pen-y-Oscedd, 1½ to 1½.

FOREIGN MINES.—Canadian Copper, 1½ to 1½; Cape Copper, 36 to 38; Colorado, 1½ to 2; Consolidated, 17s. 6d. to 20s.; Copiapo, 8½ to 9½; Don Pedro, 10s. to 15s.; Eberhardt and Aurora, 3½ to 4. Santa Barbara, 2 to 2½; the advices show a profit for March of 427½ 6s. 3d. The gold return (3742 oits.) is estimated at 15907.7s., against a cost of 1163½ 0s. 9d. Flagstaff, 15s. to 20s.; Frontino, 3½ to 4; Glenroar, 1½ to 1½; New Quebrada, 3½ to 3½; Nouveau Monde, 1½ to 1½; Panulillo, 3½ to 4; Port Phillip, 10s. to 12s. 6d.; Richmond, 16 to 16½; Ruby, 8½ to 8½; St. John del Rey, 21s. to 22s.; South Indian Gold, 1½ to 2; Placerville, 2½ to 2½; Blue Tent, 2 to 2½; Birdseye Creek, 1 to 1; Hultfall, 2½ to 2½.

The Market for Mine Shares on the Stock Exchange has been, as it invariably is at Whitsuntide, devoid of animation, yet the amount of business done has been large, as compared with what would have been considered excellent a few months since. The metal markets have not materially improved, but there is still confidence that the depression is but temporary, and that the revival will take place in time to prevent a suspension of dividends in those mines at present in the Dividend List.

Devon Great Consols shares have been in demand at 13 to 13½, leaving off at 13½ to 14½, and appear scarce, which is not to be wondered at, seeing such a highly satisfactory half-yearly report and statement of accounts which were issued yesterday. A reference to these statements is made in another column. The half-yearly meeting is to be held on Wednesday, when some further satisfactory particulars will, no doubt, be given to the shareholders.

The Devon Great United Mines (which adjoin Devon Great Consols) are to be reworked by an influential company, which is fully referred to in another column. The shares close at about 4½ to 5 premium, and it is said, on good authority, are likely to have a great rise in price. Although the prospectus was only issued on

Thursday, a very large number of shares have, it is believed, already been applied for, and the list will, it is understood, be closed on Thursday. The Devon Great Consols management (London as well as local) will, it is said, direct the operations and management of Devon Great United, and it is believed to the mutual advantage of both companies. There is considered to be no doubt but great success will be the result to those who are fortunate enough to secure shares as an investment in such an extensive and valuable undertaking as Devon Great United, and which may be justly termed a sister mine to Devon Great Consols, seeing that the rich and main lodes of the latter go into Devon Great United Mines.

West Devon Consols have, a correspondent writes, "been visited during the past six weeks by several members of the Stock Exchange, and after their visits have bought shares in large numbers. Some two months since, when a writer, who did not give the public the guarantee of his name, wrote disparagingly of the company, because he had lost money in its mines some years previously, I stated that I considered it to be a very fine speculation, and that I did not know a better piece of ground anywhere. Shares were then 30s.; they have been done this week at 4s., and I believe will go higher."

Wheal Eliza Consols, which is largely held in Birmingham, has declared a dividend of 4l. per share out of the profits of the three months' working. This raises the total dividends declared on each share (18l. paid) to 34l. 10s., or 35.328l. in all.

The Anglo-Espana Company, formed with a capital of 150,000l., in shares of 10l. each, and with an influential direction principally French, presided over by an esteemed correspondent of the *Mining Journal*—Sir Francis C. Knowles, Bart., F.R.S.—are inviting subscriptions for 10,000 shares, one half of which have, it is stated, been taken by French bankers. The object of the enterprise is to take over the property, concessions, &c., of the New Tharsis Sulphur Company.

It is estimated by Mr. Geo. Robson, certificated mine manager, that there are nearly 3,000,000 tons of mineral similar to that of Rio Tinto and Tharsis which can be worked above water level. The prospectus, which will be found in another column, states that the produce from these mines has yielded 42 per cent. of sulphur and 2½ per cent. of copper, and their productive capacity has been estimated at 50,000 tons a year, when laid open on the scale contemplated by this company, the net revenue from which will, it is calculated, be the prices now offered for the output of the mines, be equal to about 24 per cent. per annum on the capital of the company. The veins or beds of mineral are both regular and well defined, and from their inclination it is believed will, at a point to which operations are now being directed, form one solid body of rich ore, when the cost of extraction will become proportionately less and the production largely increased. The present mode of working the mineral is somewhat on the principle adopted in coal mines, known in England as the long-wall system, and the containing rock being soft, roads and drivages along the face of the ore can be executed cheaply and expeditiously. The company purposes opening up and developing the mine on a much larger scale than has hitherto contemplated, with a view of realising the utmost profits they are capable of yielding; and with this object provision has been made for ample working capital. It is also stated that the company has received an offer from a house of good standing to purchase the entire output of mineral at prices upon which the above-mentioned probable profits are founded. The prospects of the enterprise are considered to be highly encouraging.

Rio Tinto, Spanish Coupon Bonds, 95 to 97; Mortgage 7 per cent. bonds, 20½ to 20½; shares, 1½ to 1½; the Crédit National of this morning regards as enigmatical the announcement that only 34 per cent. of the subscribers can receive allotments, considering that the new bonds are still *en réclamation* at Paris, and that nothing is said in London as to the date at which the allotment will take place.

St. John del Rey, 220 to 230; the shares have been favourably affected by the directors' announcement that at the general meeting on June 30 they will recommend a dividend of 12½ per cent. for the half-year. A dividend at the rate of 25 per cent. per annum is without doubt a most effective answer to the adverse statements which caused the recent depression.

Richmond, 16 to 16½; the usual telegram from the mines at Eureka Nevada state that the week's run was \$70,000, from 1000 tons of ore. During the week the refinery produced doré bars to the value of \$50,000. In connection with the meeting on Tuesday some rather persistent efforts are being made by individual shareholders to secure the declaration of a larger dividend than that proposed in the report, but it is much to be hoped that the meeting will at once reject any resolution to that effect, and give their full support to the directors for creating a reserve fund, and thus securing the permanent property of the enterprise. By far too many mining companies which would otherwise have continued profitable have been utterly ruined following the suggestions of those who care nothing for the future if they can only temporarily run up the shares by the declaration of a large dividend whether justified or not. The manager (April 28) writes that in the end of the main 200 drift they have started to cut out the ore for timber, and it looks very favourable for a good sized ore body. An excavation 14 feet square has been made with ore still in the top, bottom, and sides. The 500 north from No. 12 chamber has been extended 7 ft. in very favourable ground: they have started a cross-cut from the end of this drift to the south, where there are very favourable indications for working ore. All the chambers are looking well, and producing the usual quantity of good grade ore.

Flagstaff are still quoted in the Official List, dealings being noted at from ½ to 13-16ths, and the closing price is marked ½ to 1. By way of addendum to the remarks in last week's Journal, it should be stated that the company in course of formation for working the property, part of which formerly belonged to the Flagstaff Company, will hold direct from the parties acknowledged by the American Courts, and represented in this country by Mr. Pearson, and that it is not proposed by the promoters of this absolutely new concern to offer the Flagstaff shareholders any privileges whatever beyond a first refusal to subscribe. Such a course would unquestionably be perfectly legal.

With regard to the district in which the property of the Empire Summit Gold Mining Company is situated, the Del Norte, Colorado, correspondent of the *Denver Tribune*, under the heading "Free Gold. Judge Bowen Strikes it Rich in his Summit Mines" (April 29), writes:—"One of the richest strikes made in the Summit district since the establishment of the camp has just been reported in the Bowen Tunnel, on the Ida Mine. This tunnel at a distance of 175 ft. struck a body of free gold ore covering the entire face of the tunnel, and 3 ft. in thickness. Several choice specimens were shown us with as fine looking gold as is found, plainly visible to the naked eye, and equal to anything found in the famous Little Annie Mine. The Iowa and Colorado Company have pushed their tunnel the past winter to a distance of over 205 ft."

Missouri Lead, 10 to 11; advice received this week report that work throughout the mines is progressing regularly and satisfactorily. The St. Clair Mine is opening up very rich, and the force of miners is being increased as fast as possible. Operations at Master shaft and Bald Hill are also being pushed forward. All the machinery is working exceedingly well.

Business in Hydraulic or Gold Washing Companies shares has been restricted, and prices remained unaltered from last week's quotations. The marvellous storms during the month of April throughout California have very much hindered all kinds of outdoor work. At Nevada City, one of the centres of mining operations, nearly 22 in. of rain had fallen in the first 24 days of April, but while temporarily interfering with business the excessive storms will, no doubt, be instrumental in providing water for a longer period this year, and thus extending the water season to the benefit of both miner and agriculturist. Blue Tent, 2 to 2½; the various claims of this company are in capital order for washing, and steady work is being carried on, though operations are slightly restricted through the storms. Birdseye Creek, ½ to 1; the late storms have impeded the washing, and prevented a clean-up for April. The accumulation of snow, however, gives promise of an extended water season.

In Lead Mine shares the amount of business done has been very limited in consequence of the extreme weakness of the lead trade, but there is still sufficient confidence in the future to prevent any material decline in quotations, which, although in some cases nominal, are quite as good as last week. Van, 18 to 19; the western ends at the bottom levels are improving. The cross-cut towards the north lode is looking exceedingly encouraging in the end. The usual sale (200 tons lead and 150 tons blende) takes place next week. Mona, 13 to 15; no change of any moment is reported from these mines. All industries there are very steadily developed with satisfactory results. Gwern-y-Mynydd, 5 to 5½; very good progress is being made at the various points of operation, as will be seen from the report in another column. Pateley Bridge, ½ to 1; there is no change reported from the mines. The agent is expecting to cut into another course of ore very shortly.

From Bettwe-y-Coed it is reported that the lode in the deep adit end is 3 ft. wide, composed of quartz, blende, sulphur, and lead ore, with every indication of an improvement shortly. The lode in the rise in the back of this level will yield 9 cwt. of lead ore per fathom. No change in the other bargains calling for remark. All the operations are carried on assiduously.

[The closing quotations being given in the Share List on the last page of the Journal it is unnecessary to repeat them here.]

GAS SHARES.—The principal business in these shares, according to this evening's report of Mr. W. L. Webb, of the Stock Exchange and Finch-lane, has been in Bombay, 6; Continental Union, 20½ to 20½; new, 14; Euro-poon, new, 9½; Gas, A, 179 to 180½; 7 per cent., H, 133 to 134; 5 per cent., 148, 17; Imperial Continental, 188 to 190; Malta and Mediterranean, 2½; London, 178½; Monte Video, 18½ to 18½; Rio de Janeiro, 28½ to 27½;

South Metropolitan, B, 181½. Gas stocks steady. For closing prices see list on last page of Journal.

INSURANCE SHARES have, according to this evening's report of Mr. W. L. Webb, of the Stock Exchange and Finch-lane, been dealt in as follows:—Continental Union, 19½ to 19½; Globe Marine, 2½; Imperial Fire, 155; North British and Mercantile, 52½; Ocean Marine, 7½; Phoenix, 308; Railway Passengers, 8. Insurance shares firm. For closing prices see list on last page of Journal.

TRAMWAYS.—The closing prices of this evening, as quoted by Mr. W. Abbott, of Tokenhouse-yard, are given in tabular form in the last page of the Journal.

* * With this week's Journal a SUPPLEMENTAL SHEET is given. Original Correspondence: Newport Abercrom Colliery; Vend of the combined Household, Steam, and Gas Coal Output of Yorkshire, Derbyshire, and Nottinghamshire (W. J. Thompson); Electric and Gas Illumination at Paris; South India—Geology; Newfoundland Land Company; the Brazilian Gold Mines; Richmond Mining Company (R. M. Brereton); Richmond Consols (R. Tredinnick); a Whitsuntide Visit to Cornwall; Wheal Uny, and its Management; Government Inspection of Mines, Western District (R. Symonds); Coal-Book Transfers; Devon Copper and Blende (W. J. Cann, W. Skewis); the South Cambrian Mines (A. Francis); Gwern-y-Mynydd Silver-Lead Mine; Half-formed Public Companies; Some Short Notices on Irish Mines. Notes from the North. Reports from Cornwall, North and South Staffordshire, Nottinghamshire, North Wales, Salop, and Cardigan, Tyne and Wear, Derbyshire and Yorkshire, and Monmouthshire and South Wales. Inspection of Explosives. Foreign Mining and Metallurgy. Meetings of Public Companies: Scottish Australian Investment, Llanrwst Lead, Wicklow Copper, and Carn Brea Mining Companies. Wheal Gwyn Consols; Parkgate Iron Company; St. John del Rey Mining Company; Almada and Tinto Consolidated Silver Mining Company, &c.

TOUTH DARREN.—The lode in the shaft being sunk below the 110 is still worth 30l. per fathom. Other parts are looking well, and they have sampled 55 tons of rich silver-lead ore for the past month.

ENGLISH-AUSTRIAN GOLD.—The advices received in the last two months having shown that good profits were being made, and these being expected to increase, the next reports due in a week or two, are looked forward to with much interest.

DERWENT.—The new lode in the rise above the 74 fm. level has been partly cut into, and so far is worth 1 ton per fm., its whole width not being yet seen. The 93, east of Westgarth's, is worth 22 cwt. and the 70, on Sun vein, 11 cwt. per fathom. The aggregate value of the stopes in the 93 is 7 tons, and the stopes in the middle vein are yielding well. Altogether the opening of this valuable property is confirming expectations, and being exempt from rents and royalties for the future it is likely to become a favourite and safe investment.

WEST CARADON.—The progress of this mine continues to be most active and important. In clearing up the 27 a good lode has been met with, worth 2 tons of copper ore per fathom. There is now a productive lode in the 50, 38, and 27 fm. levels, whilst the lode in the adit (or 30 fms. from surface) promises an early improvement. The mine has just been inspected by the Duke of Leeds' mineral agent, who speaks most favourably of the prospects. He values the points of operation as worth in the aggregate 7 tons of copper ore per fathom, and says the mine is one of the best speculations in the county of Cornwall. His report will appear in next week's Journal.

NEW CATHEDRAL.—This mine continues to look well. In addition to the report from the agents, which appears in the usual place, a letter from Cornwall states the mine to be better than when last reported on—the lode in the winze most promising—and that in all probability a similar lode will be met with in the 52 end east after 4 or 5 fms. further driving, which will bring it under the perpendicular of the winze. The lode in the shaft is also very promising, and it is expected the day is not far distant when every point will be paying. It was only during the present year that mining operations were recommended by the present adventurers.

WEST DEVON CONSOLS.—These shares have been rather an exception to the general character of the business transacted this week. They advanced to 4½, at which price they have been done in the Stock Exchange, and are now 3½ to 3½, and are now expected to go much higher. The back of another lode has been seen in the river, and fine stones of ore broken. This property is creating very great attention, and every week witnesses a fresh rise in the price of the shares.

RHOSMOR MINE.—The shareholders are to be congratulated on the patience with which they have awaited the prosecution of the Halkyn deep level drainage, which has now been successfully carried out to a point to drain the present workings, and, as the result, we notice that at the last Holywell Ticketing the Rhosmor Company sold the first parcel of lead (60 tons) raised since the workings have been resumed; and we understand it is believed the mine will bring monthly a similar and gradually increasing quantity into the market.

RUBY AND DUNDEBERG.—The weekly report and cablegram received by the company this week appear in another column, and highly satisfactory progress is again shown. The ore smelted during the week was 88 tons, the ore extracted 134 tons, the balance being 96 tons ready for smelting; it will be remembered that there were 50 tons balance unsmelted last week. The progress made at the mine will be more easily understood by the following statement of the ore raisings during the current month:—For week ending May 6, 53 tons; week ending May 13, 93 tons; week ending May 20, 134 tons. This is the best answer which can be given to the depreciatory reports which have been recently circulated. The value of the ore increases as the work of development progresses. The net value of the ore to the company is \$25, and this leaves an estimated profit of not less than 2000l. a month. In regard to the recent discovery at the El Dorado, a large sample of ore has been assayed. The result has been received, and shows a total value of \$237.15 per ton for silver and gold, exclusive of the value of the lead.

IMPROVED BLOW-PIPE.—A simple and efficient method of maintaining a continuous supply of air under light or heavy pressure has been invented by Mr. BURGESS, of Philadelphia. The pump cylinder is mounted on an arched standard, and contains a piston having a valve opening upward. This piston is connected with the foot pedal by a forked connecting rod, and is moved by a slight and easy motion of the foot. The upper end of the pump cylinder is closed, with the exception of a valve aperture, which is covered by a valve, opening upward into a cylindrical air reservoir secured to the upper end of the pump. Near the top of the air reservoir there is a nipple, to which is attached a flexible tube communicating with the blow-pipe. The apparatus may be used to advantage in connection with the small melting furnaces now so largely in use. It is also of great utility to machinists and steam, water, and gas-pipe fitters in making alterations and repairs, as it admits of the local application of a strong heat, and thus obviates the necessity of removing the parts. The blow-pipe may be used effectively in connection with a gas, spirit, or oil flame. It is by the manufacturers of this blow-pipe that the pump possesses many advantages over the bellows, as the pressure of many pounds is readily sustained with but little exertion.

MANUFACTURE OF IRON AND STEEL.—In the manufacture of steel by the Bessemer process a portion of the converter—the bottom—is usually composed of a number of perforated-fire clay plugs termed tuyeres, set in bricks or plastic material. This bottom is connected with a blast-box or common chamber into which the perforations of the whole of the tuyeres open. The consequence is that when the vessel is turned up, the blast escapes through the upper rows of tuyeres and the metal runs in and fills the holes in the lower tuyeres to a greater or less extent, thus destroying the tuyeres or injuring them in a serious manner. When operating upon phosphoric pig-iron in a vessel lined with a basic material according to Mr. Snellus's invention of 1872, it is almost impossible to get tuyeres of the same material to endure, and bottoms are made by ramming well burnt lime (mixed with binding substances such as tar, to render it plastic) into a box and making a number of rather large perforations in the bottom for the blast to pass through. These perforations are as before stated in connection with a common blast chamber, and thus the same difficulty arises as in the ordinary method, and the bottom has the further disadvantage of being less durable than when separate tuyeres are used. According to Mr. Snellus's present invention he dispenses

with the separate tuyeres and perforations, and conducts the blast from the blast-box through an annular chamber about ½ in. wide, having a total area about equal to that of the whole number of holes in the tuyeres now used. He further so arranges the parts that the blast can only escape through those portions of the annular space that are covered or about to be covered with iron, and he thus prevents the metal entering and plugging up the space. He also so arranges the parts that the joints can be got at and made up outside the blast box, thereby facilitating repairs. The bottom as thus arranged may be made of a solid block, or built up of bricks, or rammed as may be desirable. By this arrangement the bottom is not subject to the action of the blast as in the ordinary method, and is more durable because it is not liable to be blown up. It is also thoroughly solid, and only requires to be completely free from moisture or anything which might cause internal disruption.

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of articles on Stock Exchange business, the Mining Market, &c. Readers of
this publication have frequently gained double the amount of their investments
by acting on the suggestions of the Editor.
Published by Messrs. THOMPSON and SOXS, 14, Old Town-street, Plymouth.

COPPER ORES.

Sampled May 5, and sold at the Royal Hotel, Truro, May 19.							
Mines.	Tons.	Price.		Mines.	Tons.	Price.	
Devon Great Consols.	94	£1 12 6		Gunnislake (Clitters).	81	£5 4 0	
ditto	92	1 16 0		ditto	79	5 9 6	
ditto	83	1 16 0		ditto	62	5 11 0	
ditto	80	1 14 0		Marke Valley	62	2 11 0	
ditto	80	1 11 6		ditto	55	3 12 0	
ditto	79	1 10 6		ditto	54	2 9 6	
ditto	78	1 11 6		ditto	34	2 4 0	
ditto	76	6 2 0		South Devon United.	40	1 14 0	
ditto	48	5 1 6		ditto	33	2 0 0	
ditto	36	2 1 6		ditto	29	2 18 0	
ditto	10	26 11 6		ditto	24	5 13 0	
South Caradon	84	3 6 6		ditto	20	3 6 0	
ditto	83	3 5 6		ditto	20	1 17 0	
ditto	85	3 13 6		ditto	12	2 12 0	
ditto	83	5 10 6		Glasgow Caradon	52	3 12 0	
ditto	45	3 14 6		ditto	50	3 4 6	
ditto	41	10 16 6		ditto	48	4 4 0	
ditto	39	10 13 0		Bedford United	70	3 4 0	
Gunnislake (Clitters).	87	5 6 6		Phoenix	25	6 12 6	

TOTAL PRODUCE.							
Devon Great Con.	768	£2041 12 6		So. Devon United	180	£ 494 10 0	
South Caradon	480	2414 17 6		Glasgow Caradon	150	550 1 0	
Gunnislake (Clit.)	324	1696 4 8		Bedford United	70	224 0 0	
Marke Valley	205	564 11 0		Phoenix	25	165 12 6	
Average standard		£ 91 9 0		Average produce		£ 14 0	
Average price per ton				Quantity of ore	2202 tons	Quantity of fine copper	155 tons 6 cwt.
Quantity of ore				Amount of money	£3151 9 0		
LAST SALE.—Average standard		£ 93 10 0		Average produce		£ 151 5 0	
Standard of corresponding sale last month		£ 99 7 0		Produce		£ 754	

COMPANIES BY WHOM THE ORES WERE PURCHASED.
Names. Tons. Amount.
Vivian and Sons. 329½. £1412 11 6
Grenfell and Sons. 429. 2273 7 0
Nevill, Druce, and Co. 430. 1370 4 3
Williams, Foster, and Co. 162½. 1767 1 9
Mason and Elkington. 163. 534 15 6
Charles Lambert and Co. 328. 857 9 0
Total. 2202. £3151 9 0

CWM BRWYNO LEAD MINING COMPANY (LIMITED).

37, WALBROOK (Nos. 107 and 108).
SECRETARY—P. HARRIS HARE.

TWO HUNDRED DEBENTURE BONDS of £10 each at par,
interest of 10 per cent. per annum, payable half-yearly
on the 1st May and 31st October.

THESE BONDS ARE NOW OFFERED TO THE PUBLIC, being
the balance of the issue of £5000 not taken up by the Shareholders.
They are secured by the lease, plant, machinery, and mineral, with
the mine and all effects, on which over £25,000 has been spent.

The mine is in full work, and it is estimated to produce 50 tons of
lead per month as soon as the necessary alterations and additions to
the machinery are completed. The motive power being entirely
water lead can be brought to bank and dressed at much less cost
than if steam were employed. The mine is fully developed down to
107½ fathoms, and in some of the levels lead ore is being broken
yielding 4 to 6 tons to the fathom.

Applications for these Bonds may be made to the National Pro-
vincial Bank of England and its Branches, or to the Secretary at
the Office, 37, Walbrook.

THE FLORENCE SILVER-LEAD AND BLENDE COMPANY (LIMITED).

OFFICES—37, WALBROOK, E.C.

The Directors of this Company have now completed their test
operations (which have lasted over several months), and satisfied
themselves of the existence of silver-lead, blende, and copper in
very large quantities, easily accessible from several points in the
property. They have also made arrangements with the vendor for
a considerable abatement in the cash portion of the purchase money,
thereby relieving the Company of a considerable liability in cash,
and have further arranged that this money shall be paid to him in
instalments of ONE-FOURTH ONLY OF THE SUBSCRIPTIONS AS
THEY ARE RECEIVED. They, therefore, feel they may now offer the
shares to the public with every confidence in the undertaking proving
a commercial success, realising considerable profits on a judicious
outlay in machinery and labour. The assays of stones taken from
the latest workings give the following results, which must prove
conclusive:—

COPPER ORE.

10½ per cent. of fine Copper.

BLENDE ORE.

57½ per cent. of pure Zinc, and 8½ ozs. of Silver.

SILVER-LEAD ORE.

80 per cent. of Lead, and 43 ozs. of Silver.

The sett is situated in the Parish of St. Ives and in the midst of the
celebrated lead mining district of Liskeard, Cornwall.

The lease is for 21 years, at a rental of £20 per annum for the
first year, increasing £10 per annum until £50 is reached, when
there is no further increase, and this rent merges into a royalty
of 1-18th.

The sett is 1½ mile long by about 1 mile wide, and is traversed by
several well-known roads.

There are two shafts already sunk about 50 fathoms, and an adit
level driven in on the course of the lodes, from which ore can be
raised at once.

There is ample water at all seasons for dressing purposes, for
which there is no extra rent.

There are good roads into Liskeard, which is only some three miles
distant, affording easy facilities for transit to and from the mine.

The Capital of the Company is £30,000, in 6,000 shares of £5
each, payable 20s. on application, 20s. on allotment, and 20s. every
three months until fully paid, with liberty to pay up in full at a
discount of 5 per cent. per annum.

Applications for Shares to be made to the Secretary at the Offices,
or to the Devon and Cornwall Bank, Liskeard, Cornwall.

WATSON BROTHERS' MINING CIRCULAR.

WATSON BROTHERS,
MINEOWNERS, STOCK AND SHARE DEALERS, &c
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

There are three distinct lodes at Garnon's shaft at Carnarvon Copper
Mine, about 2 fms. of ground between each lode, and the ore is
rich by a slide which crosses them. We cannot say how much ore
has been returned altogether from this shaft, which is only 80 fms.
deep, but 30,000 lbs. has been got, we are told, in one year. The
shaft was sunk to the 70 perpendicularly, and the ore dipped away
from it so fast that it was worked to the 80 by a series of sump winzes
in the ore ground, and a winze below the 80—which is the deepest
working in the mine—is in ore worth 4 to 6 tons per fathom. But
it is full of water, and has been so for years, though we had it pumped
out by hand to enable Capt. Mitchell, of Parys Mountain, to see the
ore and value it. To work this properly it was thought best to sink
an entirely new shaft from surface, which has been done 90 fms.
deep, at a cost of some thousands of pounds, owing to the hard
ground; and a 90 fm. level has been driven within 12 fms. of the
ore ground, and when this is reached in a few months we look to
great results. The new ground, or rather the new discovery in the
western ground, is also very important.

The Prince of Wales Copper Mining Company, which has sold over
50,000 lbs. worth of copper ore, and paid good dividends, is now in
12,000 shares, and there is a balance in hand of nearly 30000 lbs.
A powerful engine is being erected to work the mine deeper, and when
in fork—that is, when the water is pumped out—we expect ore imme-
diately. These shares and those of Carnarvon, Prince of Wales, and
Polrose (four coming mines) should be bought and put by for a few
months for a large profit.

Crebbors also at present prices, for should copper advance again
these shares will rise also. There will be a very great mine here when
the 120 is reached by the new shaft, and until that is done the hope
is that good dividends may be kept up. At the bottom of the
120 there is a known course of ore gone over for a great length, but
it will not be touched until the shaft is down.

Drws-y-Coed: We may give some particulars shortly; it has made
very large returns of copper ore for the last 100 years, is still at
work, and adjoins Carnarvon Copper.

The Gorse shaft at D'Eresby Mountain is now down 15 fms. below
the No. 5 level, and driving will soon be commenced. It will be re-
membered that on the discovery of the big stope at the No. 4 the
valley adit at No. 5 had to be brought up about 300 fms. long to get
under the stope, and at a very large expenditure of time and money.
When under the great stope the old men's water-wheel was found in
the debris, just as it had been told it would be, and there was evi-
dence to show that these old workers had, before they were crushed
in, returned large quantities of lead—some say, as much as 100 tons
a month. At any rate they sunk a sump winze, which was cleared
up and a good lode of lead found in it, and all around it. At this
point, at the end of last year, Capt. Waters, of Roman Gravel, was
sent to inspect the mine, and to recommend the best way of working
the ore. He advised sinking the Gorse shaft, and when down 15 fms.
below the No. 5, to drive and open out the lode for stoping. This
shaft is 30 fms. north of the great stope and sump, and about 48 fms.
deep from surface. A part of the lode is in the shaft, and it will now

be cut through and driven upon to get under the great stope, and we
have been led to expect that good returns can be made. We hope
also that the price of the ore will soon improve.

The Tavistock Canal has to be cleaned out periodically, and as that
operation had to be began last Friday evening, it was reported that
the water-wheel of Wheel Crebor would, in consequence, be stopped
for ten days, which would have a serious effect on the next sampling,
and shares drooped upon it. We are glad, however, to say that the
stoppage was only for a very short time, and the wheel went to work
again as early as Tuesday night.

The Parys Corporation have about two-thirds of the great open-
cast, and the Mona one-third; but the latter mine has also a smaller
open-cast further east. We have no fear but that we shall have a
good course of ore under the open-cast at Parys before long; but the
delay, as all delays are, is tedious, and many people get tired out and
sell their shares. At the last meeting of Parys there were ochres
and ores in the mine raised and paid for worth, according to the
agent's estimate, 2732½; but they were not brought into the ac-
counts as assets, not having been sold. The Chairman, however, ex-
plained to the meeting that they were in reality valuable assets.
If copper were at a good price this mine could realise 200 to 300 tons
of ore per month.

We cannot advise "X."

Notices to Correspondents.

* Much inconvenience having arisen in consequence of several of the Numbers
during the past year being out of print, we recommend that the Journal should
be filed on receipt; it then forms an accumulating useful work of reference.

LENGTH OF ENGLISH TUNNELS.—The length of the Stanedge Tunnel, L. and N.W.R.,
Manchester to Leeds, is 5430 yards; the Woodhead Tunnel, M.S.L.R., 5300 yards;
but these are short compared with the St. Gothard Tunnel, 16,280 yards; and
the Mont Cenis Tunnel, 13,364 yards.

STEAM FUEL.—As there is a proposition at present under discussion for establish-
ing in the chief manufacturing centres of France and Belgium agencies for the
sale of English steam coal, I should be glad if some correspondent would state
the annual consumption of steam coal at Paris, Brussels, Lyons, Rouen, Lille,
Roubaix, and any other manufacturing centres, with the price per 1000 kilos at
present paid.—CARBON: Manchester, May 19.

MINE SURVEYING.—I should be glad to learn the name of the maker of the cheapest
form of goniometer for mine surveying without the use of the magnetic needle.
I believe an instrument of the kind, invented by Prof. Junge, was described
some years ago in the Mining Journal by Mr. G. J. Günther, but I can neither
find the notice nor the name of the maker.—MINER.

NORWEGIAN ASSAYS.—Having just had an interesting report of some Norwegian
nickel mines submitted to me, I find a series of analyses by Mr. Herre Morkensen,
of Christiania, which I do not exactly understand, probably because the Nor-
wegian mineralogist has used his national system of assay notes. I ask, there-
fore, an explanation of one only that I may comprehend the principle adopted.

The assay note reads:—“Bok partikkel, 72-99 per cent.; nickel and cobalt,
1-97 per cent., which gives in clean pyrites 3-3 per cent. nickel and cobalt.”
CAPITALIST: May 17.—(There is nothing peculiar about the note. The Germans
and Scandinavians always assay the whole lode as broken, so that suppos-
ing the lode to which the assay notes relates is 20 ft. wide, it means that the un-
dressed ore will average 1-97 per cent. of nickel and cobalt throughout the entire
20 ft.; that 72 per cent. of the stuff can be separated by washing, and that the
remainder gives 3-3 per cent. of nickel and cobalt. Thus (1-97 × 100) ÷ 23 = 3-82.
Each 100 tons of stuff as broken from the lode—that is, each 23 tons of dressed
ore—would yield 1-97 ton, or 1 ton 1 cwt. 30 lbs. nearly of nickel and cobalt.
English assays usually give the percentage on the dressed ore.)

Received.—“W. G.” (Salt Lake City)—“Shareholder” (Indian Grange Gold
Mining Company)—“J. B.” (Old Bond Street)—“Shareholder” (Yafwith).
“R. M. C.”—“W. K.” (Lady Bertha) should apply to the Secretary.—“E. G. S.”
(Forest Hill)—“J. W.” (Redruth)—“B. R.”—“Shareholder” (Wheal Grenville).
“Old Reader” (Glasgow)—“N. S.”—“W. B. P.” (Chontales): All that our
correspondent writes respecting the management of this company has already
appeared in the Journal; and as he attended the meeting last week he should
have then shown to his co-shareholders that he was justified in his censure—
“Amicus” should write to the directors: we could not publish such an elaborate
statement.—“J. M.” (Edinburgh)—“E. H.” (Strata Florida): Next week—
“D. F. M.” (Newcastle): Next week.

THE MINING JOURNAL, Railway and Commercial Gazette.

LONDON, MAY 22, 1880.

CANNEL OR GAS COAL.

The most valuable seam of coal worked in the kingdom is that
known as cannel, noted for the large quantity of oil or gas that it
produces. Some of the finest specimens are those known as the Scotch
Boghead and the Leeswood curley, the latter being brought to light
in 1862, by Mr. J. Higson, the eminent mining engineer, who a few
days since brought the peculiar nature of the Flintshire cannel under
our notice on our alluding to it in a general conversation on the
state of the coal trade. In Lancashire, however, cannel coal was
known in the early part of the 17th century, when it was used by
the poor people not only instead of candles, but was manufactured
into various articles of ornament, having all the appearance of jet,
and capable of having a high polish. CAMDEN, in speaking of its
discovery at Haigh, near Wigan, says:—“This neighbourhood
abounds with that fine species of coal called cannel or candle; it is
curious and valuable, and besides yielding a clear flame when burnt,
and, therefore, used by the poor as candles, is wrought into candle-
sticks, plates, boxes, &c., and takes a fine polish like black marble.”
But cannel is not only found in Scotland and Wigan but in other coal
mining districts, and has been met with connected with other seams
in some parts of Yorkshire in a basin-shaped form, but limited in
extent and thickness. In one part of the West Riding it has been
worked for some time, being a portion of a bed, the lower part being
ordinary bituminous coal, whilst the upper part is known as “stone
coal” or cannel. This cannel, it would appear, existed originally as
pure vegetable mud, and was formed at the bottom of a small in-
terior lake, and as it contains fish remains it must consequently have
been deposited under water. The margin of the lake would be some-
what nearer to the places where the band of cannel coal began to
appear in the seam, and the carboniferous forest would, of course,
still continue to flourish all round the lake as far as the swamp ex-
tended. Such is the process and means by which the cannel coal
was formed. But in nearly every instance the seams, or portions of
seams, where they are connected are, as a rule, very thin, so that
they will be exhausted before so very long. At Wigan the cannel
coal varies in thickness from 1 to 3 ft., but unfortunately it thins
away in every direction from Wigan as a centre. But when exhausted
there will still be the Arley Mine, which appears to be identical with
the Silkestone coal of the Midland field. As before stated, the cannel
coal was first worked in Flintshire in 1862, in which year the quan-
tity raised was 28,816 tons, the collieries being the Leeswood, Coed
Talon, Coppia, and Nerquis, which in 1865 gave a yield of 150,000
tons, but of late years not so much has been raised.

The curley cannel, which is below another bed of it, ranges from
1 ft. 6 in. to 1 ft. 8 in. in thickness, whilst the smooth cannel is up-
wards of 2 ft. thick. The cannel is about 100 yards below the main
coal. At Leeswood Green the roof was found to be a rich oleaginous
shale averaging some 7 or 8 in. in thickness. The curley cannel has a
peculiar appearance, being bright and imperfectly conchoidal, with
flat circular disc-like appearances, and when polished is not at all
unlike our Yorkshire jet. Near to Glasgow, to the west and south,
there is a bed of cannel amongst the upper limestone series, and is
supposed to be identical with the well-known Lesmahago cannel,
which contains a large quantity of oil. But the Boghead gas coal is
the most remarkable and valuable of all the parrot coal of Scotland
for the quantity of oil and solid paraffin which it is capable of pro-
ducing. It is from 18 to 20 in. in thickness, resting on a floor of fire-
clay with stigmatica fossils, and overlaid by oil shales, and occa-
sionally by blackband ironstone. In Midlothian, below what is
known as the great seam, and which has been traced for a distance
of 12 miles, the difference dividing the two being about 250 fms., is
what is known as the North Greens coal, which is the same as the

parrot coal so far as the production of gas oil is concerned. In Fif-
shire also there is the parrot seam of coal 2 ft. thick. To the south
of the route of the Lanarkshire coal field is the detached basin of
Lesmahago, where the gas coal is considered to be in the same geo-
logical horizon as that of Glasgow, being well down in the limestone
series. In some parts of the North of England cannel coal has been
found, but not worked to any extent, and now it is principally con-
fined to the Wigan district and Scotland, although some qualities of
an inferior character are raised in other parts of the kingdom. The
North Wales seams seem in extent to have been less than what was
at first anticipated, so that the tonnage raised has greatly declined
as well as the number of works engaged in the extraction of the oil
from it, which at one time was a profitable business. The following
figures will show the value of cannel in the various localities so far as
the yield of gas is concerned:—

Coal.	District.	Cub. ft. of gas per ton.
Boghead.....	Linlithgow.....	15,480
Lesmahago.....	Lesmahago.....	13,500
Capeldrea.....	Fife.....	14,300
Wemyss.....	Fife.....	14,200
Arneston.....	Midlothian.....	12,600
Ramsay.....	Midlothian.....	10,300
Kirkness.....	Kinross.....	12,800
Ince Hall.....	Lancashire.....	11,400
Wigan.....	Lancashire.....	12,000
Wellsgreen.....	Flintshire.....	11,400
Leeswood (curly).....	Flintshire.....	14,280
Ditto (smooth).....	Flintshire.....	10,000

The Boghead coal, it will be seen, is the best so far as productiv-
ness in gas, and it has also the highest illuminating power. The coal
itself is brown, compact, and massive, containing a few impressions
of sigillaria, its principal fracture slaty, conchoidal; cross-fracture
irregular, streak yellow; thrown on the fire decrepitates slightly, does
not fuse but splits; the colour of the ash is white, with nitrate of
cobalt, blue. It, however, does not produce anything like the quan-
tity of coke; indeed, only about half of that of the Wigan cannel,
whilst silicate of alumina constitutes the ash of the Boghead, and
oxide of iron and silicate of alumina that of the Wigan cannel coal.
The thinness of the seams of cannel and the comparatively limited
area of most of them will cause them to be exhausted in a consid-
erably less time than any of the other beds, even in the same district,
but there will still be left a vast area of the Silkestone coal, which for
gas making purposes is second only to the cannel. Some of the
latter, like that at Thorncliffe and Hoyland, will give nearly 12,000 ft.
of gas to the ton of coal, so that as the seam is extensively worked in
the Wigan district under the name of the Arley Mine, as well as
throughout the greater part of the Midland coal field, the largest in
England, there will be an immense reservoir of gas coal to fall back
upon as the cannel is gradually worked out.

THE WELDING OF IRON.

The process of welding iron appears to be a very simple one, still
even amongst practical ironworkers many are not acquainted with
what it really means, for they have merely looked upon it as the
gluing together of two portions of metal when in a certain state
along with a very small portion of cinder. Opinion indeed varied
very much on the subject of welding on the part of our leading iron-
makers, and the deductions from the experiments made have been
more misleading than otherwise, and, therefore, of little or no prac-
tical value. On one occasion Sir W. ARMSTRONG, at a gathering of
the Iron and Steel Institute, remarked that at his works he found
that in proportion as the iron had a stee character so it was un-
favourable for welding. Mr. EDWARD WILLIAMS, another high
authority, considered welding to be a combination of effects, of the
joining of the surfaces, and soldering them together by means of
cinder. There would be poor welding, Mr. WILLIAMS believed, where
there was no actual contact of the metallic surfaces, and only the
soldering of the layers together by means of cinder; but if a large
proportion of surface were brought directly into contact with the
layer next to it the welding in every way would be good, still he
thought perfect welding was nearly impossible. Mr. W. M. WILLIAMS
has pointed out that the clear surface of pure iron put together at a
proper heat united closely and perfectly. A blacksmith, he remarked,
when he wanted to make a weld in a common fire threw sand on the
surface to be joined, so as to convert the oxide into a fusible silicate,
and then brought the fluxed surfaces together, and by hammering
forced out the liquid silicate, and so effected the welding; but if he
had a film of oxide between the surfaces that would prevent the
welding. He had followed out that principle by using finely ground
flint employed for glazing earthenware, made a point of it, and ap-
plied it to the surface of the pile on both sides of each layer, and
after the piles were rolled into plates they did not show any signs of
lamination. Still, all practical men know that there is a great deal
of defective welding, such as will not stand, and this is owing to a
deficiency of knowledge as to the means that are best suited for
joining two pieces of metal together. A great deal of the bad weld-
ing is undoubtedly due to the want of proper heating, as well as in
some slight degree to the nature of the fuel employed, which should
be free from all metallic impurities and contain little or no sulphur,
whilst the combustion should be most complete. Mr. HOWSON, of
Middlesborough, who has paid a great deal of attention to the sub-
ject, considered that some flux was necessary in effecting a perfect
weld, but the more perfectly the cinder was expelled the nearer the
approach to homogeneity, so that the question was as to the best
means of getting rid of it. A puddled ball of iron consisting of a
number of nuclei of tolerably pure wrought-iron interlaced with cinder
or with cavities which have once been filled with cinder in a liquid
state when compressed under the hammer or squeezer became by the
uniting together of the nuclei a more or less solid mass of iron, for
the greater portion of the cinder being expelled permitted metallic
contact at a greater number of points and over a larger area. Mr.
NEWCOMB, the well-known foreman ironworker in the North of
England, is opposed to the particular view of Mr. HOWSON as to the
using of any flux, which he considered was not necessary to effect a
perfect weld were the iron comparatively free from carbon and the
proper condition of heat observed. Simple then as has the process
of welding been considered, it will be seen that there is considerable
divergence of opinion with respect to it on the part of our ablest
practical men. According to Mr. NEWCOMB, where flux was used it
was chiefly sand, and was so employed because in joining two
pieces of iron together different kinds of splicing or scarling were
adopted. Sand was sometimes used when the iron was on the anvil,
but only when the iron was overheated and would not bear hammer-
ing, and the smith was always careful to keep the sand on the face of
the scarf, for he knew from experience that the closer he kept the
two surfaces together the more perfect would be the weld. Mr.
HOWSON says, however, that the skill of the workman has to be
exercised in heating the iron sufficiently, in protecting the surfaces
from oxidation by means of a flux, and forming the surfaces in such
a way that the flux has a means of escape when the ends are closed
up under the hammer.

The natural flux is the oxide of iron, which forms during the pro-
cess of heating, but being of an infusible character, and a welding
heat not being a smelting heat, it was liable to resist union by its
very dryness, so that the workman assists the fusibility of the oxide
by the addition of a silicious sand—the silica operates in a twofold
manner, for it unites with the oxide to form a glass which is fusible
at a comparatively low temperature. The glass overflows the heated
part, and protects it from further oxidation, whilst its fluidity causes
it to be more easily expelled when the union takes place. Silica we
are told is a good flux, but a mixture of borax, silica, and alumina
are better than silica alone. In Sheffield it appears that the flux
generally used for welding cast-steel is a dried brick-clay, containing
about 58-50 per cent. of silica and 33-0 per cent. of alumina, with a
small quantity of peroxide of iron and lime. At Low Moor, so noted
for its iron, according to Mr. HOWSON, after the iron is puddled the
balls are each hammered into a separate slab, and are then re-heated
and doubled again until the required weight has been obtained, and
the whole is then reduced by hammering, involving fresh re-heating
to a slab of the proper dimensions and shape for the rolls. The slab,

It may be said, is not rolled with the original laminations horizontal but vertical or cross-grained, this being a precautionary measure for the detection of flaws. The process of manipulation produces a most perfect weld, no trace of the lines of junction being seen. The conclusions of Mr. Howson are worthy of being generally known to all persons connected with any branch of the iron trade. In the first place, he says that when two surfaces of wrought-iron in a half-melted or viscous state are pressed together the intervening cinder is expelled, provided it is liquid enough, and has a chance of escape, so that cohesion results. This is what really constitutes a weld, and if the proper conditions have been fulfilled such a weld would be as sound as any other part of the bar. The requisite conditions are seldom or ever absolutely carried out in practice, in consequence of the difficulty of uniting two surfaces without enclosing some small quantity of cinder; the effort should, therefore, be to expel as much of it as possible, and then dilute the remainder by after working. It is evident that the oftener iron is doubled and drawn the more is the small quantity of cinder contained in it for fluxing reduced. There was another point which was often overlooked in welding—that was, in the selection of suitable iron, for the amount of heat which would be absorbed before it became soft would be sufficient in all probability to destroy a common and soft iron by burning. All our smiths and other ironworkers consider the welding of iron as a very simple and easy matter, yet as to the best mode of piling or making layers into a solid homogeneous matter is still an unsolved problem, but to which the attention of our leading ironmasters is being directed, as they consider it one of the not least important questions left them to agree upon, seeing that they are the persons most interested in it.

AFFAIRS IN THE UNITED STATES.

It cannot at present be affirmed with any real truth that there has been any marked slackening in the work of railroad construction in the United States. There is no doubt that the bewildering prosperity which set in in the United States three or four months since has received what may, after all, prove a salutary check, and that prices of every description of iron and steel show a marked and decided fall. But still for all that we cannot really see that there has been any material check given to the work of construction. Seven years of patient thrift and persevering improvement have effected a great change for the better in American railroad property. The introduction of steel rails, the issue of preference stock and bonds at a relatively moderate rate of interest, and the consolidation of groups of lines into a few great systems have very materially improved the prospects of the American railroad interest. The introduction of steel rails has a tendency to very sensibly reduce American railroad maintenance charges, once extremely formidable. We can but attach great importance to the reduction effected in the rates of interest attached to preferred stocks and bonds.

In 1873, when the great JAY-COOKE panic set in, American railroad companies issued bonds in the most reckless fashion. In too many cases no share capital worth mentioning was really issued, but the markets of the Old World were flooded with bonds bearing 7 or 8 per cent. interest. The weaker companies issuing such bonds as these never had the means of meeting the coupons falling due every six months, and their promoters troubled very little whether they had the means or not. But wild cat schemes of this description are happily not so common as they formerly were. In this more sober and prudent 1880 we do not hear of 8 per cent. bonds, but 5 per cent. bonds are much more common. The more powerful and prosperous railroad companies of the United States are, indeed, beginning to contemplate the issue of 4½ per cent. bonds. Then the consolidation or amalgamation arrangements which have been taking place of late among American railroad companies have an obvious tendency to check foolish and profitless competition for business, so that altogether the prospect in store for American railroad proprietors is decidedly more hopeful than it was seven years since.

We are quite aware that there is a certain recklessness or over-sanguineness in the American character, which is always a source of danger. Tolerably well assured of all the average comforts of life, and with a profitable future in store for all his children if they are but commonly industrious, commonly thrifty, and commonly honest, the average American goes through life in a much more adventurous fashion than the average Englishman; and hence in American "rail-roading" there is always a danger that even legitimate enterprise may be overdone. Still, in estimating the chances of another American railroad panic, with its attendant prostration of the iron trade of the world, we think we are fairly entitled to take account of the favourable circumstances which still exist in connection with American railroads. At any rate, these circumstances have a tendency to postpone the day of panic and peril if they cannot altogether avert it.

CARDIFF AND SWANSEA STEAM COAL COMPANY.—Reference has already been made to the important discovery on this company's Resolven property, a new seam of coal, 3 ft. 9 in. in thickness, having been struck at the depth of about 80 yards. The seam has turned out to be of excellent quality for steam purposes, and may be classed among the leading steam coals of the South Wales district. It extends under no less than 3000 acres of property, and calculating 4000 tons to the acre, this will bring up a total of 12,000,000 tons of workable coal. This vast addition to the workable coal in the company's property is of great importance to the shareholders, and there is every prospect that the company will reap great benefits in the future from this valuable discovery. There is a solid top rock, which is of especial advantage in securing the economical working of the coal, as there will scarcely be any pitwood required, the item under this head in many collieries being a very serious charge. In addition to this there is no water to contend with, and coupled with the fact that the seam is of such high quality, the company may be congratulated on having, after years of difficult trading, at last secured the reward of their persevering efforts.

IMPORTANT NEW COAL WINNING NEAR MANCHESTER.—During the last five years mining operations have been carried on at Ashton Moss, near Manchester, for the purpose of winning the valuable seams of coal which lie under that district. A short description of the work so far as it had then proceeded was some time back given in the Journal, and as already reported two shafts had been sunk to a depth of about 700 yards, when some doubt arose as to the actual position in which the seams sought for would be found, and the work of sinking was suspended. Boring operations were then commenced, and these have been continued during the past six months by means of Vivian's boring apparatus, until they have now been carried to a further depth of about 260 yards below the shafts already sunk. The result has been that several seams of coal, varying in thickness from 2 ft. 6 in. to 6 ft. 4 in., have been proved, some of these being of first-rate quality, both for house-fire and steam purposes, whilst the position in which the coal has been found justifies the belief that the measures worked at the Lord's Field Colliery, nearly two miles distant on the rise of the new shafts, are continuous between the two points. The other boundaries of the coal field would appear to be, on the western side the fault passing in a north-westerly direction through Droylsden; on the northern side the great fault separating the Ashton from the Oldham coal field; and on the southern side the faults which are encountered by the northern limits of the Denton collieries. It will thus be seen that a very considerable area of coal will be opened out by the new colliery, and the proved existence of valuable seams in the above district is a fact of considerable importance to the manufacturing centres of Ashton and Staleybridge, and to the numerous works on the eastern side of Manchester, which will thus be placed within easy reach of a largely increased supply of fuel suitable for manufacturing purposes. The actual depth at which the seams will be worked having now been proved, and the engineers having thus been able to decide upon the strength and class of machinery which will be required, the sinking of the shafts has been resumed, and it is expected the operations will now proceed without further interruption. The owners of the colliery which is being sunk, and which, situate as it is within readily available means of communication both by railway and canal, has every prospect of proving a successful undertaking, are—Lord Stam-

ford and Messrs. B. Whitworth, Walker and Greenwood, and the work has been carried on under the superintendence of Mr. John Higson, of Messrs. J. and P. Higson, civil and mining engineers, Manchester, Mr. Greenwood being the resident mining engineer at the colliery.

THE ROYAL COMMISSION ON ACCIDENTS IN MINES.

The Royal Commission appointed some time ago to enquire into the working of coal mines in this country has, we understand, concluded taking evidence, and has commenced paying a series of visits to the various parts of the country in which coal mining is carried on. They visited the Barnsley district on Thursday, their first place of call being the Strafford Collieries, near Barnsley. The members of the commission were Professor Warrington Smyth (chairman), Professor Tyndall, Professor Abel, Mr. T. Lewis, South Wales; Mr. Lindsay Wood, Hetton Collieries, Durham; Mr. Thos. Burt, M.P. for Morpeth; and Mr. Williams (secretary). Mr. R. Carter, C.E., F.G.S., president, Mr. T. E. Embleton, ex-president, and Mr. J. Mitchell, secretary of the Midland Institute of Engineers, were of the party. Mr. Miller, manager of the Strafford Collieries, a gentleman of great experience, and a vice-president of the Midland Institute of Mining, Civil, and Mechanical Engineers, met the members, who were brought by train into the colliery sidings, and conducted them over the pit, which they descended. They spent about two hours in examining the colliery, and visited the place where some time ago a serious outburst of gas occurred, and which gave off gas until three weeks ago. Several members expressed themselves satisfied with the evidence previously given and the evidence which was laid before them as to the outbursts of gas.

After having luncheon, the party, accompanied by Mr. Miller, entered the train, which was waiting for them, and proceeded at once to the Oaks Collieries. The train stopped close to the pit, and was met by Mr. James Wilson, the certified manager of the colliery, a gentleman of great experience; Mr. James, the commercial manager; Mr. Mammatt, engineer; and Mr. Thomas Dymond, Burntwood Hall, formerly managing proprietor of the colliery. The party descended the shaft at the New Oaks, and examined the pit thoroughly, paying particular attention to the edge of a graf from which gas was given off. They were not able to see the places where three serious outbursts occurred in the year 1877, but they seemed to be very much interested in all they saw that pertained to the evidence they had had previously laid before them, and which related chiefly to outbursts of gas. They expressed themselves satisfied with the ventilation and state of the roads. At the luncheon afterwards, Prof. Smyth alluded to the great difference which was to be observed in the general condition and ventilation of the mines now to what he had seen when he visited them 20 years ago. Having lunched, the party left for Doncaster, and afterwards returned to Barnsley, having concluded their labours so far as South Yorkshire was concerned. Referring to the matter of outbursts of gas, to which the principal part of the evidence from this part of the country has been directed, we may, our correspondent states, observe that they form a danger peculiar to this district.

The many serious casualties which have arisen from this cause renders it one of very deep and intense interest, and every means of combating the danger which skill and science can suggest have been adopted in this district. Not without success have these efforts been made. The outbursts are common, but the explosions, happily, are rare. At the Strafford Collieries, first visited by the Commission, outbursts of an extensive character have taken place, and the lessons learnt therefrom have been acted upon. At various times since 1867 there have been such outbursts. The most recent of which we have knowledge occurred in 1877. In that year an outburst which fouled the return for a distance of a mile, and which fired and extinguished the men's lamps, took place. The gas came from the floor, rending it for 40 yards in one place, and 80 in another. It was four days before the issue so far ceased as to allow of a safety-lamp being used for the examination of it, and the gas continued to exude for two months afterwards. A current of 14,000 feet of air per minute was passing through the pit at the time. At the Oaks Colliery many such outbursts have occurred. In 1877 there were three, all of which were of such power as to extinguish the lamps of the men and cause the airways to become foul. These are not by any means all that have occurred at these pits; but they go to show that every precaution is taken in working the mines, for a single defective lamp, or any light at which the gas could ignite, would have resulted in a great calamity.

THE HISTORY OF A GREAT MINE.
DEVON GREAT CONSOLS.

Although for the past thirty-five years Devon Great Consols has been constantly referred to as a highly successful mining enterprise, and although during that period the total capital invested has been returned 117 times over (and in other words, has yielded an average profit of 330 per cent. per annum), the report just issued, and which will be presented at the forthcoming meeting, shows that comparatively little of the property has yet been explored, and that the ore sold during the six months now reported upon has proved to be of nearly 30 per cent. higher value than that obtained during the preceding six months, whilst the ore actually discovered represents no less than 25,908 tons of copper ore, and 2,000 tons of arsenical munde. By the judicious application of a portion of the revenue to provide working capital, instead of appropriating every penny as dividend and starving the concern, the company have been enabled to purchase 460,000l. worth of machinery and plant, and to pay 1,615,616l. for wages and materials, and by this means they succeeded in raising nearly 640,000 tons of ore, which sold for 3,300,128l. Out of this, in addition to the outlay just mentioned, 254,950l. was paid as dues, and 1,199,616l. has been distributed as dividends amongst the shareholders, who may, moreover, well congratulate themselves that their prospects at the present moment are brighter than they have been for several years past.

By way of appendix to the report Mr. PETER WATSON, the indefatigable chairman and managing director, has had a very interesting statement compiled showing the extent of workings, with particulars of machinery, tramways, leats, inclined planes, railways, arsenic works, &c., connected with the mines, and, accustomed as one is to regard the Devon Great Consols as an enormous undertaking, the figures are really astounding. The mines are worked through 12 shafts with six miles of pitwork, and two man-engines, and there are 41 miles of underground drivages, five and a half miles of which are provided with tramways. There are 10 steam-engines and 11 large water-wheels in addition to "several smaller ones," which it seems to be thought are too trifling to be particularised. There are five miles of railway connecting the arsenic works with the Morwellham floors, and another mile for connecting the new shaft with the dressing-floors, the rolling stock consisting of two locomotives and 60 ore and timber wagons—this is exclusive of about six miles of tramway. The arsenic works cover an area of eight acres, and include seven calciners, three refineries, 5429 ft. in length of flues, or about a mile, the working capacity being 242,461 ft., arsenic mill driven by steam-engine, spacious stores for arsenic and staves, coopers' shops, two changing houses for men, &c. The dressing-floors are 250 fms. or ¼ of a mile in length, and there is a large extent of precipitate works for extraction of copper held in solution in mineral water pumped from the underground workings, a number of large reservoirs, and a great extent of catch pits and slime settlers for purification of the water (required by the Water Pollution Act) before reaching the River Tamar.

The earliest discovery, and that from which the largest proportion of the enormous riches just mentioned have been obtained, were made in the north-western portion of the property, and a company—the Devon Great United Company (the prospectus of which will be found in another column of to-day's Journal)—has now been formed, with a capital of 24,000l., in shares of 2l. each, and with Lord Claud Hamilton and Messrs. Morris and Treherne, all directors of the Devon Great Consols, with Mr. S. York, of Wolverhampton, as the board of direction to develop the property adjoining Wheal Maria to the west, and traversed by the rich lodes of that mine, and the direction and manage-

ment, both in London and locally, will, it is believed, be identical with that of the sister mine—Devon Great Consols. From the reports of the various agents who have inspected it, and whose connection with Devon Great Consols is a guarantee for their knowledge of the district and of the lodes, the property would appear to be one of great promise; indeed, 45,000l. worth of copper and arsenic was actually obtained from no deeper than 71 fathoms, when a disagreement with one of the lords led to the suspension. There is an excellent plant of machinery at the mines, including 56-in. pumping-engine, with boilers, 14-in. rotary engine, 24-in. winding-engine, Cornish crusher, arsenic calciner, stamps, pitwork, &c., which with but small additions will be ample for a productive and extensive run of mines, which it is not doubted the amalgamated sets acquired by the Devon Great United Company will become.

NICKEL MINING IN NORWAY.

With a view to take advantage of the increased application of nickel, the nickel deposits of Høiaasen, in Norway, have been placed in the market, and as analyses show that the dressed ore is worth 3½ to nearly 5 per cent. of nickel, it is considered that they will afford a good field for enterprise. The mines are situated in the side of the Høiaasen Mountain, which is covered with fir and pine forest and other timber, and are just above the Estraavandit lake, which is a few minutes' walk from the fjord of Tvedestrand, a town midway between Christiania and the port of Christiansand. Indications of nickel have been obtained in various places extending over a considerable distance, and the present owner has worked 1000 tons of nickel ore from the property, and from the favourable samples of nickel ore obtained in the eastern portion of the estate it is believed that good ore can be obtained there in abundance, whilst the only rent payable is 4l. per annum for a piece of ground between the pit and the lake.

The property was thoroughly inspected in November by Mr. E. J. Beor, of Netherop, near Chepstow, and he reports that the nickel ore which appears speckled and clean is found above the mica slate in the lower part of the mountain. At about 200 ft. from the lake and 70 ft. up the mountain an adit level has been driven about 100 ft. north-westerly. In this he found "very good nickel ore of a breadth of about 30 ft.," the ore in the bottom is very rich. Rich nickel ore has also been worked in a level about 50 ft. north up the mountain, and in another 40 ft. west of this about 70 tons of clean nickel ore has been obtained. Between 200 and 300 ft. west of the first mentioned level a pit nearly 60 ft. deep has been sunk, and levels driven in rich ore. The samples analysed by Mr. Morkensen, of Christiania, show—from open-cutting: undissolved rock particles, 29.00; copper, 0.57; nickel, 3.48 per cent., which gives in clean pyrites 4.90 per cent. nickel—from the level: rock particles, 77.8; nickel and cobalt, 0.77 per cent., which gives clean pyrites 3.5 per cent. nickel—and from the pit: rock particles, 72.00; nickel and cobalt, 1.07 per cent., which gives in clean pyrites 3.8 per cent. nickel and cobalt.

The mines are, Mr. Beor reports, most favourably situated for erecting smelting furnaces, being so close to the lake and to the road from the fjord on the shore of which Tvedestrand is situated. This road is a moderate incline suitable for a self-acting tramway. The extent of the concession appears to be, estimating roughly, equal to a parallelogram of about 25 chains by 16 chains, or upwards of 320 acres. There is a good site for erecting buildings, timber is very cheap, and stone plentiful; there is no scarcity of workmen, wages are very low, and a convenient landing stage could be erected for the loading of vessels with ore from the mines. Considering the advantages of the property, Mr. Beor believes that under good management it will prove a profitable investment for capital.

GEOLOGICAL SOCIETY OF LONDON.

May 12.—ROBERT ETHERIDGE, F.R.S. (President), in the chair.

Rev. Samuel Gasking, Cheetham Hill-road, Stalybridge; Thomas John George, Keynton, near Thrapston; and Cuthbert Chapman Gibbs, M.D., Surbiton Hill, Kingston-on-Thames, were elected Fellows of the Society.—John Burn Antis Du Sautoy, C.E., Blenheim-road, Bedford Park, Chiswick; and Rev. John Cowley Fowler, B.A., North Stainley Vicarage, Ripon, were proposed as Fellows; and Prof. M. G. Dewalque, Liège, was proposed as a Foreign Member; and Prof. Leo Lesquereux, Columbus, U.S., as a Foreign Correspondent of the Society.—Prof. Frederick Guthrie, F.R.S., Science Schools, South Kensington; Rudolf Häusler, Western College, Harrogate; James Hulmes, Bury Hall, Wolverley, Worcestershire; Wm. Jolly, F.R.S.E., Inverness; Charles Myhill, Curzon School House, May Fair; and Alfred George Savile, B.A., Grosvenor School, Nottingham, will be balloted for as Fellows of the Society.

The following communications were read:—

- 1.—"On the Structure and Affinities of the genus Protospongia Salter," by W. J. Sollas, M.A., F.G.S.
 - 2.—"Note on Psephophorus polygonus, von Meyer, a new Type of Chelonian Reptile allied to the Leatherly Turtles," by Prof. H. G. Seeley, F.R.S., F.G.S.
 - 3.—"On the occurrence of the Gluton, Gulo luscus, Linn., in the Forest Bed of Norfolk," by E. T. Newton, F.G.S.
 - 4.—"A Review of the Family Diastopodidae for the purpose of Classification," by George Robert Vine: communicated by Prof. Duncan, F.R.S., F.G.S.
 - 5.—"On Annelid Jaws from the Wenlock and Ludlow Formations of the West of England," by G. J. Hinde, F.G.S.
- The next meeting of the Society will be held on Wednesday, when the following communications will be read:—1. "The Pre-Carboniferous Rocks of Charnwood Forest. Part III.," by Prof. T. G. Bonney, M.A., F.R.S., F.G.S., and Rev. E. Hill, M.A., F.G.S.—2. "On a Second Precambrian Group in the Malvern Hills," by C. Callaway, D.Sc., M.A., F.G.S.—3. "On the Geological Age of the Rocks of Central and West Cornwall," by J. H. Collins, F.G.S.

BRITISH IRON EXPORTS.—A return has been compiled from Custom House sources showing the extent of the exports of iron from the various ports of the kingdom for the month of April. It appears from this that Middlesbrough stood at the head, exporting 58,274 tons of pig iron, Liverpool taking second rank with 25,378 tons, and Glasgow following with 23,575 tons; Newcastle-on-Tyne exported 7,053 tons; Ardrossan comes next with 6,909 tons of pig iron; and West Hartlepool, exporting 6,578 tons, is closely followed by Whitehaven, with 6,037 tons. Cardiff exported 4,706 tons, and Hull 4,704; Grangemouth, 3,858 tons; Troon, 2,850; and Newport, 1,254 tons. Of bar-iron and of rails the largest quantities were exported from Liverpool, Newport, Cardiff, and Middlesbrough in the order named, the quantity sent from other ports being very small.

THE ANGLO-ESPANA COMPANY.—In calling attention to the prospectus of this company, which will be found in another column of the Journal, it may be useful to remind investors that this class of enterprise has been of a highly profitable character, the net earnings of the Rio Tinto Company for the past year having reached no less a sum than 459,000l., while the 10l. shares of the Tharsis Sulphur and Copper Company stand at 29l. per share, and for a recent issue of 2,500,000l. of bonds by the Rio Tinto Company applications were received for 5,500,000l. sterling. The shares of the Anglo-España Company are offered at par, the deposit being 2l. per share, payable on allotment, there being no application money to pay. The direction, which is unexceptionable, includes a strong French banking element, and the prospects of success appear to be of a very high order, an offer having been made to purchase the entire output of the mine, the anticipated profits from which are equal to 24 per cent. per annum on the capital of the company.

PRINCE OF WALES MINE.—In connection with the reference in last week's Journal to the retention of names of defunct companies in the Stock Exchange Official List, the chairman of the existing Prince of Wales Company—Mr. J. Y. Watson, F.G.S.—writes that he thinks the only Prince of Wales ever quoted on the Stock Exchange is that of which he is chairman, and that although reconstituted, it is not only still in existence, but has large assets and nearly 3000l. in hand, whilst its progress is weekly reported in the *Mining Journal*.

The remarks were merely made to illustrate what the writer considered to be a defect in the Official List, and which he is anxious to see remedied. They could not by any possibility have been intended to refer to the company to which our esteemed correspondent belongs—indeed, Mr. Watson's name as chairman would be satisfactory proof of honourable and competent management.

THE WESTHOUGHTON COLLIERY ACCIDENT.

At the inquest on the bodies of John Crankshaw and John Woodward, who were killed at the Westhoughton Coal and Cannel Company's new pit whilst descending, some important facts were elicited. Mr. Dickinson, H.M. Chief Inspector of Mines, represented the Government, and Mr. C. H. Holden, the company. The father of Woodward stated that on Wednesday morning they were going down the pit together. There were also in the cage himself, his son, John Crankshaw, John Coope, Wm. Jolly, and Thomas Williams. They all stood on one deck, it being a single decked cage. When starting they had all lamps. They started all right, and he noticed nothing unusual until the accident, which occurred half way down the shaft. At this point the ascending cage caught the one in which they were, and knocked it on one side. The shaft was an upcast shaft, and it was smoking. When the cages caught they were all knocked to the bottom of the cage. William Jolly said he was in the cage when the accident happened. He was standing with John Coope. He noticed nothing unusual until the crash of the two cages meeting. By Mr. Dickinson: He did not notice that a new cage had been put in on Monday, but he knew that one had been put in. He went down in the old cage, the new one not being used for men so far as he saw. He saw the new cage on Wednesday. It had then two empty tubs in it. There had been no "larking" whilst going down; they stood steadily all the way. There had been some windings before he got there.

The cage was divided into three compartments, and there were two in each compartment. Robert Crankshaw had gone down in the same cage about five minutes before. It then went down steadily; he noticed no vibration. He knew that a new cage had been put on on the previous Sunday, but he did not observe any difference in consequence. By Mr. Dickinson: Nothing had been done in the shaft that morning. The furnace was in working order at the time; it was well fired up. He was in the first set that went down after the fireman. The accident occurred in the fourth run after he went down. By Mr. Holden: There was no access to the new cage at the bottom—at the yard coal; it was fenced off. John Hutchinson, manager of the colliery, said the shaft was 161 yards deep to the yard mine and 295 yards to the lower mine. The cages were guided by slippers and wire rods twisted, an inch in diameter. Two rods go to the bottom and two to the Yard coal, being fastened at the bottom to bearers, and screwed at the top. They are fastened to the cage by two 1½-in. pipes. There were two guides to each cage on the outside. The shaft is 12 ft. diameter; there is about 15 or 18 in. between the side of the shaft and the cages; the cages were 3 ft. 3 in. wide, by 7 ft. 3 in. long, and there was about 8½ in. between the cages. One cage had been in work about 12 months, and the new cage was exactly the same size as the other. Before this was put on there was an iron balance weight. He had been up and down the shaft since the new cage was put in, but had noticed no more vibration than before. The engineer was a careful steady man. He had worked cages on wire guide rods with 9 in. between for years, and never had an accident before. The guides were tightened on Saturday night last. The old cage was knocked over one side and the new one slightly damaged. They bore clear marks of a collision. By Mr. Dickinson: Each cage had the slippers and pipes on after the collision. The balance they used before was a piece of iron 2 ft. square by 1 ft. deep, and this was guided by a pair of wire-ropes. The furnace was low when they screwed the guides up on Saturday night. The guides would slacken with the heat. The fireman had been cleaning his furnace out, and had got a good fire before the accident; he thought he was firing up at the time of accident, and the descending cage would be meeting 120,000 ft. of air. This he thought would cause oscillation, and so probably caused the accident. The other cages which he had worked only 9 in. apart were only half the length of these. He now thought the cages were rather too near, and they were making preparations for altering this. They had worked successfully, however, for two days. They did not intend to work the cages again until they had put two additional ropes between the cages to act as a kind of buffer. There was another shaft at this colliery 295 yards deep, and there were guide-ropes there. They were 15 in. apart. They were putting weights to the guides at the bottom, so that they would keep tight, notwithstanding the variability of the temperature. After getting the new cage on they ran it up and down as hard, for about half an hour, as they could, and it ran as smoothly as possible. The cages were then empty. The putting on of the cages with 8½ in. between was discussed by witness and Mr. Stott, the managing director. Mr. Stott asked him if he thought the distance sufficient, but he did not reply; he did, however, think it was not sufficient, and they had considered the desirability of putting additional guides in, but nothing definitely had been settled. The descending cage first struck one of the buckling chains of the ascending cage, about 2½ links above the cage. If one cage was in its proper place the other must have "swagged" about a foot, but he thought both were swaying. The winding-ropes held good. It was his opinion that the guide-ropes being slack allowed the cages to come together. Whatever was the cause of the slackness he could not positively say.

The Coroner said the only question was whether there was any gross negligence for which anyone was to blame. There did not appear to be any. A Jurymen: Are we to understand that the shaft is not to be worked until these guide-ropes are put in?—Mr. Hutchinson: Not until they have been put in. The Jurymen: Was it true that one or more men refused to go down that morning?—Mr. Hutchinson: I said that he had never heard anything of it. The jury returned a verdict of "Accidentally killed," and stated that they were of opinion that the distance between the cages was too small.

The Coroner said he quite agreed with them. He thought that was a matter the proprietors of the colliery ought to take very great care about, even in working them with the additional guide-ropes. He thought they had better carefully consider whether they were perfectly safe or not, but he had no doubt they would do that.

Mr. Holden said he was sure the jury would know that there had been no money spared in laying out the colliery, and that any recommendation they could make would be carefully considered by Mr. Stott and his co-directors.

The Coroner supposed the only suggestion they could make was that the new arrangement might be more effective and safe.

In reply to the Coroner, Mr. Hutchinson said that the other man (Coope) who was thrown out was doing well, and there was no likelihood of fatal consequences.

DEVON GREAT CONSOLS COMPANY.

The report prepared for presentation at the meeting, to be held on Wednesday, is again of a highly satisfactory character. The six months' sales of copper ores, 5294 tons 18 cwt. 1 qr., realised 14,308l. 17s. 5d., or an average of 2l. 14s. per ton, being about 12s. per ton higher than the previous six months' sales, which amounted to 4989 tons, realising 10,522l., or an average of 2l. 2s. per ton. The average price of Devon Great Consols copper ore was in 1847, 6l. 15s. per ton; 1857, 6l.; 1867, 5l.; 1877, 3l. 10s.; 1878, 2l.; 1879, 2l. 2s.; and in the last six months 2l. 14s. per ton. Although only this advance during the past six months has been obtained, the directors hope and believe with the revival of trade which has set in during the last half-year, and looking to the increased demand for copper with a less quantity imported into this country, that much better prices will be again attained for this company's ores than at present. The amount received on account of arsenic in the last six months amounted to the highly satisfactory sum of 15,517l. 5s.

The purchase-money (3000l.) for the Abbotsfield property has been received and credited, and the Tamar View residence has been let to the purchaser at 50l. per annum, and the first half-year's rent credited. There has been a considerable increase in the general outlay at the mines. During the last six or eight months seven rock-drills and one air compressor and receiver, with a large quantity of tubing, have been purchased, so as to expedite the driving of the levels and the laying open of a greater extent of ground than could be executed by hand labour. The resulting advantages will soon repay the heavy outlay made.

Some six months since the directors ordered the erection of the necessary appliances for clearing Watson's portion of the mine; this has involved a heavy outlay, and is now nearly accomplished. About 280 fms. of flat-rods have been laid at surface, and connected with Richards's large water-wheel, which it is considered will be of sufficient power to drain this portion of the company's property to any depth required, and from all the reports and information received, large returns in the shape of copper ore and arsenic mudic are expected.

The arsenic contract entered into on Jan. 9, referred to in the circular issued to the shareholders on the same day by the managing director (being the largest contract ever entered into for arsenic by this company), a payment of a third of which has been received from the purchasers, and is credited in the company's half-yearly accounts, and from the high commercial standing of the parties to the contract, there can be no question of its being satisfactorily carried through by the monthly stipulated payments.

Before the great advance in the price of mine materials the directors gave instructions to procure nine months' supplies of the various heavy articles they required—such as iron, steel, coals, timber, &c., for the mines. This was done, and has already secured a very large saving to the company. This, with the outlay in the purchase of rock-drills, compressor, tubing, &c., and work accomplished in connection therewith, and expenditure already made in connection with Watson's part, has cost the company some 5000l.

Taking this heavy payment into consideration, the shareholders may be congratulated that the accounts for the half-year (commencing Oct. 31, 1879 with a credit balance of only 2880l. 0s. 2d.) show that after the payment of a dividend in February (the 151st of 8s. per share (or 40 per cent.), amounting to 4096l., there is still a balance remaining in favour of the company of 11,271l. 17s. 6d., being a much larger amount than has appeared to the credit of the company for many years. The directors at their board meeting on the day of the general meeting will declare a dividend.

Capt. Isaac Richards reports upon the various points of operation at the surface and underground. He states that with the advantage of rock-drill machinery, which for some time past has been at work at Dawe's cross-cut, in the 190 and 137 east, on the new south lode, their progress at these points has considerably improved, and this desirable and effective power will be of great importance in the future development of the vast extent of mineral ground still remaining unexplored throughout the mine. As Watson's, having successfully started their pumping machinery, referred to in the former part of this report, they hope soon to resume operations upon the lode in this portion of the company's property, and looking at the very promising character of the lode in the present shallow

workings, the congenial channel of ground, and also considering the fact that good returns of ore have already been made from these shallow workings, they confidently hope that as the working are extended in depth at the engine-shaft, and to the east and west thereof, valuable and profitable discoveries of copper and mudic ores will be met with. The machinery is working most satisfactorily, and they hope to have the mine drained to the bottom and to be ready to commence operations on the lode in about three weeks from the present time.

The table of work and wages shows that the men have worked well, and made good wages. During the 24 weeks ending March 20 the sinking of shafts has progressed rather over 12½ fms., at a cost to the company of 13l. 18s. 11d. per fathom; the winzes and rises have progressed 22½ fms., at 14l. 15s. 6d. per fm.; and the levels have progressed 165½ fms., at 10l. 10s. per fathom. The cutworkmen have averaged 3l. 3s. 10d. per month for the whole period. The reserves are—in Wheal Maria, 60 tons; Fanny, 425; Anna Maria, 1476; Josiah, 1844; and Emma, 22,103=25,908 tons, in addition to 22,000 tons of arsenic mudic.

The report of the engineer—Mr. William Mathews—upon the machinery is highly satisfactory. After ample details he says—"I do not see that we shall during the next year have any outlay more than the ordinary wear and tear such a large quantity of machinery usually requires."

The meeting will be fully reported in next week's Journal.

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
May 1—	Tamar Silver-Lead	15 3 2	£14 1 6	Nevill, Druce, and Co.
	Grogwinion	100	10 7 0	ditto
	Berlanga (Silver-Lead)	195	10 7 0	ditto
	80 per cent. lead, 8 ozs. silver, at 11l. 7s. 6d. per ton; 50 tons, 75 per cent. lead, 8 ozs. silver, at 10l. 5s. per ton; purchased by Sheldon, Bush, and Co.			

The Devon Great United Company

(LIMITED).

Incorporated under the Companies Acts, 1862 and 1867, whereby the liability of Shareholders is Limited to the amount of their Shares.

CAPITAL £24,000, IN 12,000 SHARES OF £2 EACH.

10s. to be paid on application, and 10s. on allotment.

No further amount of capital is likely to be required or called up beyond this £1 per share in the year 1880.

DIRECTORS.
The Right Hon. Lord CLAUD HAMILTON,
HUGH STANLEY MORRIS, Esq.,
HENRY RICHARD TREHERN, Esq.,
SAMUEL YORK, Esq., Merchant, Wolverhampton.

BANKERS.
ALLIANCE BANK (LIMITED), London, E.C.

SOLICITOR.
G. H. BARBER, Esq., 34, Old Jewry, E.C.

SECRETARY—W. H. ALLEN (Secretary to Devon Great Consols Company, Limited.)

OFFICES,—18, AUSTINFRIARS, LONDON, E.C.

This company has been formed for the purpose of purchasing the plant, machinery, licences, and leases of setts or mines, heretofore called the West Maria, Wheal Fortescue, and Wheal Williams (with the additional ground thereto), under leases to be granted by the several lords for 21 years, viz.:—Messrs. Willesford, Right Hon. Earl Fortescue, and the Duchy of Cornwall, and for working or developing the said mines or any part thereof, as may be deemed desirable. The whole properties, including the machinery, are offered for the sum of £6000 to a company, to be called the Devon Great United Company (Limited); and that the Devon Great shareholders shall have the first option of subscribing for 10,240 shares, being a *pro rata* interest of the share in the Devon Great Consols Company.

During the last workings a part of the property was known as West Maria and Fortescue Consols; and from those workings, nearly all above the moderate depth of a 71 fathom level, copper ore and arsenic were sold amounting to about £45,000.

These mines are situated immediately to the west and adjoining the celebrated Devon Great Consols (which on an outlay of £1 per share £10,240, has given in dividends £117 3s. per share, or £1,198,848). The copper ore and arsenic above referred to were produced not more than about 150 fms. immediately to the west of where the Devon Great Consols made its first grand discovery.

One of the main objects in starting the late West Maria and Fortescue Consols was to drive west to the cross-course which passes through this and Wheal Williams; but, owing to a certain disagreement with one of the lords, all operations westward were suspended. They were, however, resumed during the late great depression in mining, and up to June, 1877, about 50 fms. had been opened on the north lode, and from one stope in bottom and back of the 71 fm. level copper ore and arsenic were sold amounting to about £9000. In the last report, presented by the agents on 27th June, 1877, we find the following:—"The 81 and 60 fm. levels west should be more particularly driven. In such case good discoveries will be made for copper ore, as the lode in the stope in the back never looked much better than at present, and is going up in whole ground, and no level driven over it. This is also the case with the run of ore gone down in the bottom of the level, and no end has ever been driven in under it. So we believe, if the 81 were driven west, a good lode must be reached; and it is a pity but this and other work could be done, seeing that the 71 has only been laid open for about 50 fathoms, and of this 30 fathoms long is productive ore ground, and no work to speak of has been done on this lode either above or below this level (71)."

It is well known that immediately to the west of the first great discovery in Devon Great Consols the large lode divided, and in going westward formed several large and well-defined lodes, the whole of which must of necessity go through the entire length of the amalgamated setts now to be worked and known as the Devon Great United Mines. The main parts go back through the Wheal Williams portion of the mines, and were spoken of by the late Captain James Richards, manager of Devon Great Consols, in a report he wrote on the property in June, 1872, extracts of which are as follows:—"Wheal Williams: This mine is situated at Latchley, in the parish of Calstock, immediately to the west of Devon Great Consols. The sett is also very extensive, and is traversed by lodes of the most promising character, which, on being fairly developed, will, there can be no doubt, prove of great value. There are three lodes laid open. The north one having yielded several parcels of ore almost close to the surface, and the middle or orchard lode, is one of the finest I have ever had an opportunity of inspecting. The lode is 6 ft. wide, composed of fine light caple, a quantity of mudic, quartz, pryan, and good stones of both copper and tin ores, precisely similar in character to the lode found at the same depth at Wheal Anna Maria, a portion of Devon Great Consols Mines, and which has yielded and still continues to yield immense quantities of ore." In this report he further states, "The whole of these lodes are intersected by cross courses, and looking at the indications presented at all points, I can with confidence recommend this as one of the most promising investments in mining."

The late Capt. James Phillips, of Bedford United Mines, writing on Wheal Williams, on the 24th February, 1865, says:—"This concern deserves a spirited outlay, and the result will, no doubt, be a profitable mine."

Capt. Thos. Richards, of Hingston Down Consols, writing about Wheal Williams in 1865, says:—"It adjoins Devon Great Consols to the west, and is a very extensive sett, containing several lodes of the highest promise, the whole of which pass directly through the Devon Great Consols, and being in the same channel of ground as those mines, with two well-defined intersecting cross-courses, it will undoubtedly become, on being fully developed, a property of very great value."

Capt. William Clemo (an agent of Devon Great Consols) in a report, states, in 1865, under the head of "Wheal Williams," an extract of which is as follows:—"This mine is situated almost close to the Devon Great Consols westward; and judging from the size and character of the lodes laid open, and the kills—which is of the most congenial kind for the production of mineral—I think that this sett is as much worthy of a trial, and is as likely to turn out well as any that can be found in the whole neighbourhood."

It is a notable fact that nothing has been done in Wheal Williams (except selling nearly the whole of the old burrows for arsenic mudic) since the foregoing reports were written. The late West Maria and Fortescue Company acquired the Wheal Williams sett, with the intention of cross-cutting south to intersect the main part of the Devon Great Consols rich lode, but this was never carried out.

There is a large quantity of machinery on the mines, comprising a 56 in. cylinder steam pumping-engine, with two boilers; a 14 in.

rotary engine; a 24 in. winding-engine; Cornish crusher; Brunton's calciner, for manufacturing arsenical soot; 12 head stamps, complete; 90 fms. 14-in. plunger-lifts, complete; 45 fms. of 10-in. and 8-in. drawing-lifts, steam capstan, &c.; forming a large part of the plant for a productive and extensive run of mines, which these amalgamated setts will undoubtedly become.

The only contract entered into is an agreement dated the 19th day of May, 1880, and made between William Mathews, Moses Bawden, and Peter Watson of the first part; and Walter H. Allen, on behalf of the company, of the second part.

In the event of no allotment being made, the deposit will be returned in full. Application, with a deposit of 10s. per share, must be made in the accompanying form, and sent to the bankers of the company.

Prospectuses and forms of application can be had from the secretary, at the offices of the company, 18, Austinfriars, E.C., where prints of the Memorandum and Articles of Association, and a copy of the said agreement of the 13th day of May, 1880, can be seen.

The following report from Captain Isaac Richards, the resident manager of Devon Great Consols, speaks for itself as to his opinion of the value of the Devon Great United Mines:—

Devon Great Consols, May 7th, 1880.

DEVON GREAT UNITED COMPANY (LIMITED).
This property, which is situated immediately to the west of the northernmost portion of the celebrated Devon Great Consols, is of considerable extent, embracing the two setts formerly known as West Maria and Fortescue (from whence, although the workings were prosecuted on a comparatively limited scale, large returns of copper ores and arsenic have been made), and Wheal Williams immediately adjoining on the Cornish side of the River Tamar. Comprised in this sett are several known well-defined and promising lodes, the mineralogical characteristics of which are precisely similar to those of Devon Great Consols, and the situation is such as not to admit of a doubt that the main lode of these great mines passes into and through this property. There are also two cross-courses intersecting the lodes, and the strata being in all respects similar to that in which the lodes have been found productive in the leading and most productive mines of this district, this property presents such a field for mining enterprise as cannot, in my opinion, fail, if properly developed, to be attended with important and profitable results.

ISAAC RICHARDS.
The report of Captain William Clemo (an agent who has been at Devon Great Consols Mines almost from the commencement) also speaks for itself as to his opinion of the Devon Great United Mines:—

Devon Great Consols, May 6th, 1880.

I beg to hand you my report of West Maria Mine, which I have had frequent opportunities of inspecting as tollor for Messrs. Willesford, the proprietors of the land. The mine is situated immediately adjoining Wheal Maria, where the first splendid discovery was made in Devon Great Consols. There are several lodes passing through the sett. These lodes are in a channel of ground precisely similar to the ore-bearing kills of Devon Great Consols, and to the west of the present workings is a very fine cross-course, from which lead has been raised and sold. All of the lodes have produced large quantities of copper ore, as well as arsenical mudic, of very superior quality. There is a long tract of ground westward which has never been tried, and looking at the congenial nature of the country, the size and character of the lodes, and the fine cross-course passing in that direction I am firmly of opinion that a trial of this ground will lead to further important discoveries. The machinery on the mine is good and strong. The dressing-floors and other requirements are well laid out, and are sufficient for an extensive working of this most promising property, the present proprietors having acquired the lease of Wheal Williams and ground to the west, and on which I have previously reported. I have no hesitation in saying that I consider the amalgamated setts through which the main lode of Devon Great Consols must of necessity pass to be such a mining property as is not often presented to the public.

WILLIAM CLEMO.

THE DEVON GREAT UNITED COMPANY (LIMITED).

No. In 12,000 Shares of £2 per Share.

FORM OF APPLICATION FOR SHARES.

(To be retained by the Bankers.)

To the Directors of the Devon Great United Company (Limited).

[Being a Shareholder in the Devon Great Consols Company (Limited), and holding therein Shares,] I shall feel obliged by your allotting to me Shares [being a *pro rata* holding in the Devon Great United Company, Limited], and on which I have paid a deposit of Ten Shillings per Share to the company's bankers, the Alliance Bank (Limited), Bartholomew-lane, London, E.C., and I agree to accept such shares, subject to the Memorandum and Articles of Association, and to pay the further sum of 10s. per share on allotment, and I hereby authorise you to place my name on the Register of Shareholders in respect of such shares as may be allotted to me.

Usual signature

Name in full

Residence

Profession or business

Dated 1880.

NOTE.—If the person applying for shares is not a shareholder in the Devon Great Consols Company (Limited) then the words in brackets and italics are to be left out.

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PARIS, 1867.
BRONZE MEDAL, 1867.



ORDER OF THE CROWN OF PRUSSIA.



PALMOLIVE, 1867.
SILVER MEDAL, 1867.

A DIPLOMA—HIGHEST OF ALL AWARDS—given by the Geographical Congress, Paris, 1875—M. Favre, Contractor, having exhibited the McKean Drill alone as the MODEL BORING MACHINE for the ST. GOTHARD TUNNEL.

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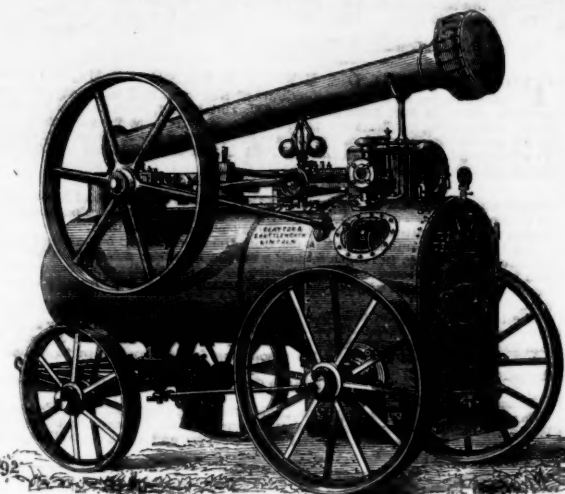
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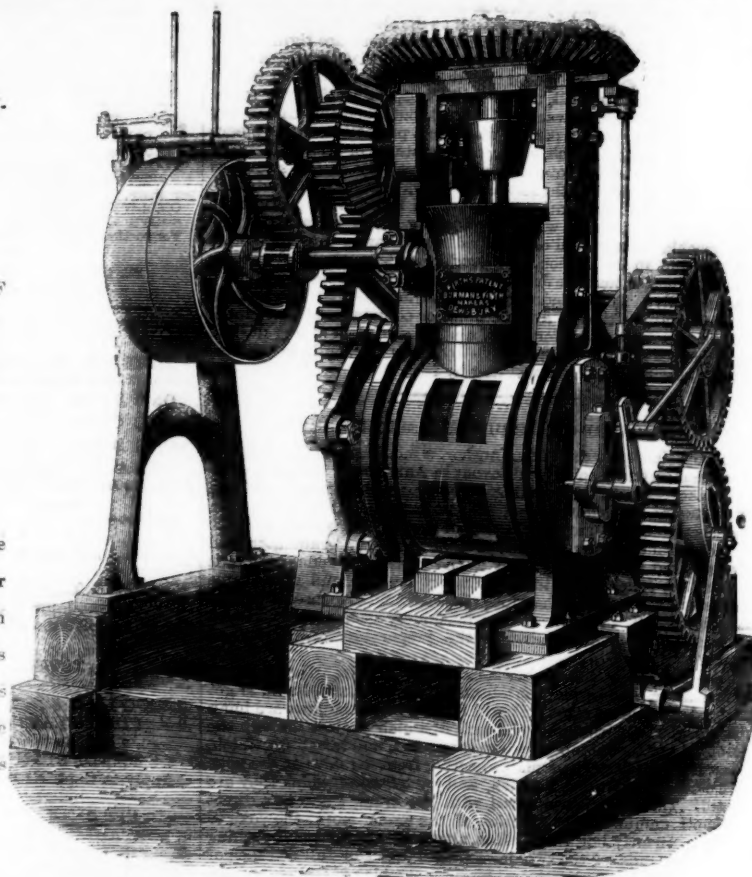
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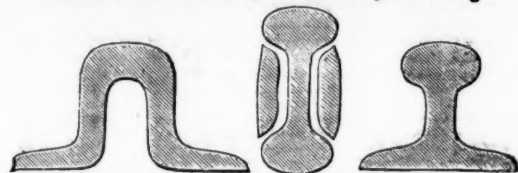
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